



Report of the Workshop for Implementing the WHO South-East Asia Regional NCD Roadmap, 2022-2030

Dhaka, Bangladesh
12-15 June 2023

Report of the workshop for implementing the WHO South-East Asia Regional NCD Roadmap, 2022-2030

ISBN number 978-92-9021-088-7

© **World Health Organization 2023**

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: “This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition”.

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

Suggested citation. Report of the workshop for implementing the WHO South- East Asia Regional NCD Roadmap, 2022-2030. New Delhi: World Health Organization,

Regional Office for South-East Asia; 2023. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Report of the Workshop for Implementing the WHO South-East Asia Regional NCD Roadmap, 2022-2030

Dhaka, Bangladesh
12-15 June 2023



Table of contents

Background and objectives of workshop	1
Inaugural session	7
Session 1: Accelerating the prevention and control of NCDs in South-East Asia 2022–2030: success stories from the countries	9
Objectives of the session	
Success stories from countries	
Updates on NCD risk factor mitigation and NCD management	
Session 2: WHO SEAR NCD Impact Simulation Tool for prioritization of NCD interventions	19
Objectives of the session	
WHO SEAR NCD Impact Simulation Tool	
Session 3: Addressing NCD in as an integral part of the response to emergencies	23
Objectives of the session	
Towards a model for service delivery for NCD prevention and management in humanitarian settings	
Findings of the global landscape and experience from other regions on NCDs in emergencies	
Session 4: Reducing gaps in cancer care in South-East Asia Region	27
Objectives of the session	
Updates on cancer control in the Region and SEACanGrid	
National Cancer Grid in India	
Reflection from countries to reduce cancer gaps	
Session 5: Systems for monitoring NCD services in primary health care	31
Objectives of the session	
Facility based monitoring indicators and application for hypertension and diabetes	
Digital Solutions for monitoring	
Outcome- based monitoring and evaluation approach: an example from Bangladesh	
Systems for NCD monitoring at the country level	
Session 6: Field Visit to observe integration of NCD services to primary health care settings in Manikganj and Observation visit to Centre for the Rehabilitation of the Paralysed	39
Session 7: Scaling up stroke care services and surveillance for NCDs	41
Objectives of the session	

Surveillance of NCDs and risk factors in South- East Asia Region

Stroke care services and surveillance

**Session 8: Country plans for implementing WHO South-East Asia Regional
Roadmap 2022-2030 in the local context** **45**

Annexures **53**

1. Message from the Regional Director
2. Programme
3. List of participants
4. Participants feedback summary
5. Resource materials / further readings
6. Dhaka Call to Action – Accelerating the control of cardiovascular diseases
in a quarter of the world's population
7. SEA HEARTS brochure

Background and objectives of the workshop



Background

Since 2014, preventing and controlling NCDs has been a Flagship Priority in the Region, and important progress has been made. Between 2010 and 2019, the probability of people in the Region dying from cancers, CVDs, diabetes and chronic respiratory diseases between the ages of 30 and 70 years declined from 23.4% to 21.6%. Several key Regional Committee Resolutions were endorsed for the prevention and control of NCDs. Dili Declaration on Tobacco Control (2015); Strategic Action Plan to Reduce the Double Burden of Malnutrition in the South-East Asia Region (2016); Colombo Deceleration to Strengthen health system to accelerate delivery of NCD services at primary health care (2016); Accelerating the elimination of cervical cancer as a global public health problem (2019) were major milestones. The Region is currently on track to achieve the Global action plan for the prevention and control of noncommunicable diseases target of a 30% relative reduction in tobacco use prevalence between 2010 and 2025 and continues to take concerted action to eliminate industrially produced trans-fats in food – a major contributor to CVDs.

However, despite these and other positive trends, the Region is currently off-track to achieve the global 2025 and 2030 NCD targets. In order not just to sustain but to accelerate progress, at the Seventy fourth Session of the WHO Regional Committee, Member States requested WHO to develop the Implementation roadmap for accelerating the prevention and control of NCDs in South-East Asia 2022–2030. The roadmap aims to facilitate progress towards the 2030 targets and was adopted in September 2022 at the Seventy-fifth Session of the WHO Regional Committee with a resolution to report the progress every two years till 2030.

The implementation roadmap provides strategic directions and tools with a view to prioritizing and accelerating high-impact interventions that are feasible within the national context. It provides guidance for prevention and control of NCDs, including links and tools for easy access. It is available as a web tool (<https://apps.searo.who.int/whoroad/>) in the South-East Asia Region NCD web portal. WHO is committed to technically support Member States in implementing the roadmap.

The workshop aimed to support countries in the prioritization and acceleration of NCD prevention and management with a specific focus on accelerating the prevention and control of hypertension and diabetes, identifying the most impactful NCD interventions within their context, closing the gaps in cancer care services through regional collaboration and integrating NCD services in when responding to emergencies.

General objective

To support countries in the prioritization and acceleration of NCD prevention and management through strategies proposed in the South-East Asia Regional Roadmap, 2022-2030

Specific objectives

- To support countries to accelerate the prevention and control of cardiovascular diseases through regional targets
- To demonstrate an evidence-based SEA NCD impact simulation tool to support countries in identifying the most impactful NCD interventions within their context to attain NCD targets
- To support countries for improving accessible and affordable screening, early diagnosis, treatment, and palliative services for cancers through South-East Asia Cancer Grid (SEACanGrid)
- To review the preparedness, and service delivery for NCDs in emergencies and to discuss the inclusion of NCD prevention and management services as integral part of preparedness, response, resilience, and recovery plans for emergencies

The workshop witnessed a diverse participation of senior officials of the Member States of the Region responsible for NCD programme management, cancer care and health systems. The technical experts, representatives of global partners engaged in NCD work, and WHO technical staff from all three levels also participated in the workshop. Participants shared good practices of the countries for cross-learning, engaged in lively discussions and hands-on activities, and had an opportunity of an experiential learning through a visit to the Upazila Health Complex and the attached community centre in the Manikganj district to observe how the country has integrated the NCDs services in primary health care.

The workshop successfully achieved several outcomes.

One of the key outcomes was the 'Dhaka Call to Action – Accelerating the control of cardiovascular diseases in a quarter of the world's population' (Annexure 6). The Call to Action represents a set of prioritized actions and interim milestones that are based on the SEAHEARTS initiative (Annexure 7).

Another was the establishment of SEACanGrid as a platform among the key cancer service provider institutions nominated by the governments. The SEACanGrid facilitate sharing of experiences on best practices, establishing standards of care, professional development, and technical collaboration among institutions in the grid. It will also work in driving policy changes towards improving care for cancers.

FOR IMPLEMENTING THE REGIONAL NCD ROADMAP

DHAKA, BANGLADESH

12 – 15 JULY 2019



SHOP

WHO SOUTH-EAST ASIA ADMAP 2022-2030

ENGLADESH

JUNE 2023





Inaugural session

WORKSHOP FOR IMPLEMENTING THE WHO SOUTH-EAST ASIA REGIONAL NCD ROADMAP 2022-2030

DHAKA, BANGLADESH

12 – 15 JUNE 2023



The workshop commenced with an inaugural session featuring key addresses from distinguished speakers:

- The Regional Director of WHO South-East Asia Region.
- The Secretary of Health Services Division, Ministry of Health and Family Welfare (MoHFW), Bangladesh.
- The Additional Secretary of Health Services Division, MoHFW, Bangladesh.
- The Director General of Directorate General of Health Services, MoHFW, Bangladesh.
- The Director (Healthier Population and NCDs) of WHO SEARO

Dr. Bardan, Jung Rana, World Health Organization (WHO) Representative to Bangladesh, conveyed a message from Dr. Poonam Khetrpal Singh, Regional Director, WHO South-East Asia Region. Dr. Singh extended her congratulations to all Member States for their support of the Regional initiative known as South-East Asia HEARTS (SEAHEARTS). This initiative has identified four critical domains – tobacco control, salt reduction, elimination of trans-fatty acids, and hypertension and diabetes management at the primary care level – as focal points for controlling cardiovascular diseases by 2025. Dr. Singh expressed her best wishes for the efforts of Member States in significantly advancing the prospects of achieving the NCD-related Sustainable Development Goals (SDGs) and fostering a healthier, more equitable, and sustainable South-East Asia Region.

Mr. Md. Anwar Hossain Howlader, Secretary of Health Services Division, Ministry of Health and Family Welfare, Bangladesh, extended a warm welcome to all workshop delegates in Dhaka. He underscored the importance of this workshop as a platform for countries to share their experiences and learn from each other regarding NCD prevention and control. Mr. Howlader also highlighted concerns about NCDs pushing millions of families into poverty and called upon all stakeholders to proactively work toward achieving the 2030 NCD targets. He emphasized the initiatives taken by the Government of Bangladesh for both NCD prevention and control, which align with the Implementation Roadmap for accelerating the prevention and control of NCDs in South-East Asia 2022–2030.

Mr. Saidur Rahman, Additional Secretary of Health Services Division, Ministry of Health and Family Welfare, Bangladesh, emphasized the equal importance of NCD prevention and management. He stressed that addressing NCDs brings both social and economic benefits, and he noted that WHO's Best Buys offer a range of interventions to choose from and implement within the context of each country.

Prof. Dr. Mohammad Robed Amin, Line Director of NCD Control, representing the Director General of Directorate General of Health Services, expressed concern about the prevalence of behavioral and metabolic risk factors in Bangladesh, which are similar to those in other countries in the region. He highlighted the need to focus on the treatment care cascade gap at both the primary and secondary care levels and reflected on the interventions undertaken by the Government of Bangladesh in the areas of health promotion, screening, early detection, and management of NCDs.

Dr. Cherian Varghese, Director (Healthier Population and NCDs) a.i. WHO SEARO, outlined the scope and objectives of the workshop. He emphasized the NCD burden at the country level and stressed the importance of a contextualized NCD response, framed as sustain, accelerate, and innovate. Dr. Varghese provided an overview of the wide range of topics to be covered during the three-day workshop, comprehensively addressing the needs of the participating countries. He underscored the urgent need for NCD-enabled health systems and the demonstration of impact in this critical area.

SESSION 1

Accelerating the prevention and control of NCDs in South-East Asia 2022–2030: success stories from the countries



The objectives of the session were to share the efforts done by countries for prevention and management of NCDs and to provide global and regional updates on NCD prevention and management. The interventions that were highlighted in the session aimed to achieve implementation roadmap 2022-2030 targets. Country delegates presented the good practices at the country level. Dr Angela De Silvia, WHO SEARO and Dr Pradeep Joshi, WHO SEARO provided progress update in the NCD prevention and NCD management respectively from the global and regional perspective. The session was moderated by Dr Taskeen Khan, WHO HQ and Dr Angela De Silva.

Country Success Stories

BANGLADESH: Trans-fatty acids elimination through implementing REPLACE technical package

Increased intake of trans-fatty acids (TFA), exceeding 1% of total energy intake, is associated with a higher risk of coronary heart disease mortality and events. TFA consumption is responsible for approximately 500,000 premature deaths from coronary heart disease worldwide, each year. Elimination of TFA from food supply is regarded as one of the most cost-effective and feasible measures for implementation.

In Bangladesh, significant progress has been made in TFA control. The country has set a new TFA limit, stating that the TFA content in fats, oils, and food products must not exceed 2% of the total fat content. Through a multisectoral process, the Bangladesh Food Safety Authority (BFSA) has notified the regulation for trans fatty acid control in foodstuff in 2021. The regulation was enforced in December 2022, making Bangladesh one of the few countries that have adopted measures for TFA elimination.

The success of TFA implementation in Bangladesh can be attributed to high-level political commitment, strong institutional stewardship by the BFSA, engagement of civil society organizations (CSOs), and the role of the media. The industry has shown cooperation, except for concerns related to gradual implementation. BFSA is planning to assess and monitor the TFA content in the food supply and incorporate appropriate standards. However, one of the key challenges faced is the lack of industry capacity to meet the 2% limit.

Overall efforts in TFA control in Bangladesh have been commendable, and ongoing monitoring and capacity-building initiatives will be crucial for ensuring compliance with the TFA limit to the population's exposure to this harmful substance.

BHUTAN: Service with Compassion and Care Initiative: a people-centred approach to NCD services

Bhutan, being the first country in the Region to pilot the WHO Package of Essential Noncommunicable Diseases (PEN) Interventions in 2010, has made significant progress in scaling up the intervention in a phased manner. However, the evaluation of services revealed major gaps in treatment coverage, availability of essential medicines, and inadequate follow-up care. In response, the Service with Care and Compassion initiative (SCCI) was introduced in 2018 to address these gaps, and it has now expanded to more than 14 districts.

The SCCI is based on the WHO technical packages - HEARTS and PEN. It employs the 7R (Robust Team Building, Reach-out to home-bound services, Refill of Medicines, Recall and Reminders, Real-time Monitoring, Reporting and Supportive Supervision, Referral and Care Coordination) and 3C (Clinical staff, Coordination, and Coaching) approach, which are adaptations of the WHO technical packages to suit the national context of Bhutan.

The SCCI emphasizes multidisciplinary team involvement, including doctors, nurses, pharmacists, laboratory staff, receptionists, and other healthcare professionals, to provide comprehensive NCD services. Reach out to home-bound services ensures systematic record-keeping of registered patients, while refill of medicines reduces out-of-pocket expenditure. Recall and reminders help with patient tracking and improving treatment adherence. Real-time monitoring and supportive supervision contribute to quality improvement. Improved referral and care coordination is facilitated through active case discussions with doctors from higher-level centers and clinical coaching provided to Basic Health Units (BHU) staff.

The Ministry of Health Bhutan has been recognized for its successful implementation of the SCCI and has received awards from the UN Inter Agency Task Force and the WHO Special Programme on Primary Health Care. To further enhance monitoring and treatment outcomes, the initiative will introduce digital health records. Impact level data will be available in the next national health survey, providing valuable insights into the effectiveness of the SCCI in improving NCD service delivery and outcomes.



INDIA: Scaling up hypertension and diabetes management in primary health care

India has made significant strides in leveraging health and wellness programs for health promotion, as well as adopting multisectoral action plans and policy coherence to address noncommunicable diseases (NCDs). One of the notable achievements is the operationalization of over 159,000 Ayushman Bharat-Health Wellness Centres (AB-HWCs), with 1.26 million healthcare staff at the primary level trained to provide essential services in these centers. This has significantly improved access to primary healthcare services for the population.

In recognition of its exceptional work in impactful hypertension intervention, India received the '2022 UN Interagency Task Force and WHO Special Programme on Primary Health Care Award' during the UN General Assembly side event in September 2022. The expansion of NCD clinics across the country is another remarkable achievement that has contributed to better management of noncommunicable diseases.

India has also adopted innovative digital health solutions, such as the eSanjeevani OPD, which allows patients to directly connect with doctors via a mobile app. This has strengthened the continuum of care and post-screening upward referral using the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and downward referral using Primary Health Centers (PHCs) and Health and Wellness Centres (HWCs).

To further enhance NCD management, India is planning to have all states develop Standard Treatment Protocols for Hypertension and Diabetes, ensuring that generic drug procurement aligns with these protocols. The country aims to provide one billion individuals with ABHA numbers by 2025 and enroll all eligible populations (30+ years of age) in the NCD portal.

The National NCD Portal is playing a crucial role in enabling universal access to preventive care. With more than 443 million people digitally enrolled, 160 million screened, 33 million unique health IDs, and over 10 million individuals put on standard care for hypertension and diabetes, the portal has proven to be an effective tool for managing NCDs at the national level.

Through these concerted efforts and a focus on health promotion, early detection, and standardized treatment protocols, India is making significant progress in combating NCDs and improving the health outcomes of its population. The country's commitment to leveraging digital health solutions and multisectoral collaborations showcases its dedication to achieving better health for all.



INDONESIA: Improving NCD Services Coverage through Integrated Primary Care Model

In Indonesia, only 2.8% of eligible individuals, out of more than 200 million people, have received NCD screening, indicating a significant gap in early detection and prevention efforts. However, there is a positive exception in the province of Nusa Tenggara Barat (NTB), which has achieved a remarkable NCD screening coverage of 51.6%, surpassing other provinces in the country.

One of the key challenges in NCD screening and early detection is the involvement of cross-sectoral institutions. To effectively promote NCD screening, multiple sectors such as the social office, education office, workforce office, religion office, and cooperation office need to work together using a life course approach. This collaboration is essential to raise awareness, ensure community engagement, and implement targeted screening initiatives at various life stages.

To address these challenges and enhance cross-sectoral collaboration, the NTB regional government took proactive steps by establishing a Governor Regulation. This regulation consolidates multiple programs and efforts, streamlining the coordination between different sectors in promoting NCD screening and early diagnosis. The regulation acts as a catalyst for cooperation and synergy among various bodies, leading to more effective and efficient NCD control initiatives.



The National scale-up of the Adopted Posyandu Prima Program (Primary Health facility satellite in the Village) also plays a significant role in this regard. While the program primarily focuses on stunting management, it has a positive impact on NCD screening and other disease control programs as well. By leveraging the existing infrastructure and resources of the Posyandu Prima Program, NCD screening can be integrated and expanded, benefiting a larger segment of the population.

Overall, the success of NCD screening and early detection in the province of NTB serves as a model for other regions in Indonesia. By encouraging cross-sectoral cooperation, implementing supportive regulations, and integrating NCD screening into existing health programs, Indonesia can make substantial progress in combating NCD and improving the health outcomes of its people.



MALDIVES: Integrating NCD services in Primary Health Care

Maldives faces a significant challenge with a high mortality rate attributed to NCDs, accounting for a staggering 84% of total mortality. Several obstacles hinder the integration of NCDs into the healthcare system, including low utilization of health services, steep costs associated with secondary and tertiary care, substantial expenditures on NCD treatment and care, and the burden of out-of-pocket expenses for transportation to healthcare facilities.

To address these challenges, a strategic approach was adopted, focusing on reorienting health services to be more accessible and patient-centered, effectively bringing healthcare to the people's doorstep. This approach involved conducting a comprehensive assessment of local conditions, developing a communication plan using the Commination for Behavioral Impact (COMBI) methodology to address misconceptions,

perceptions, and potential barriers, securing support from community leaders and community-based organizations, and maximizing the use of existing public and private resources and infrastructure.

Moreover, this effort included assessing the training needs of healthcare professionals and creating a PHC revitalization Action Plan, emphasizing the importance of political commitment through evidence-based advocacy and investment cases. Screening for NCDs was incorporated into the social health insurance system.

Innovative approaches were employed, such as altering the New Patient Care Pathway, implementing COMBI-style communication techniques, and providing incentives for using community health facilities to deter self-referrals. Remarkable achievements included the establishment of a Demonstration Atoll (Faafu), where 90% of the adult population aged 18 and above have been enrolled, and 85% of adults aged 35 and above have undergone screening. Other notable accomplishments encompassed the development of an NCD Registry and a Monitoring and Evaluation Framework for PHC.

Crucial lessons learned from this endeavor include the significance of securing political commitment, gaining support from community leaders, and harnessing existing resources effectively. Policymaking and planning should be developed through a participatory approach, with advocacy efforts targeting community leaders and utilizing community feedback, alongside awareness campaigns conducted through social media platforms.



NEPAL: Integration of NCD services with mental health

Nepal bears a significant burden of NCDs, with approximately 10% of its population affected by mental health disorders. The country has identified various opportunities for effectively integrating NCDs with mental health services. These opportunities include adopting a primary healthcare system approach, improving program management for both NCDs and mental health at provincial and local levels, capitalizing on emerging medical and health universities for preservice education, and implementing



in-service training programs. Collaborative efforts involving governmental and nongovernmental institutions are deemed crucial.

Nepal has developed clear policy and program strategies aimed at strengthening the delivery of NCD and mental health services, demonstrating strong government commitment. This commitment is exemplified by the rollout of the Special Initiative for Mental Health (SIMH) in 14 districts and the NCD initiative in 8 districts. In these pilot areas, various initiatives, including the integration of mental health services into the Mental Health Gap Action Programme (mhGAP) and Package of Essential Noncommunicable (PEN) interventions, have been launched. Furthermore, there has been the commencement of clinical mentoring programs for nonphysician primary healthcare workers in mental health services, led by psychiatrists.

The lessons derived from this project can be applied to other countries. Establishing program management convergence between NCDs and mental health within the framework of a federal government structure is of paramount importance. The effectiveness of primary healthcare services, as evidenced by their functional performance, plays a critical role in ensuring service provision. Partnerships with medical and health institutions are essential for developing competency-based training, encompassing both pre-service and in-service training.



SRI LANKA: Salt reduction through implementation of WHO SHAKE package

Sri Lanka serves as a remarkable example of the successful implementation of the SHAKE package on a national scale. This accomplishment is attributed to a comprehensive set of strategies.

Surveillance efforts were enhanced by incorporating inquiries related to dietary salt intake into national surveys. This approach enabled Sri Lanka to gain insights into the trends and specific food items contributing to excessive salt consumption. Advocacy meetings with major restaurant chains facilitated a voluntary process that led to the laboratory analysis of over 250 commonly sold restaurant items. Clear targets for salt reduction were established, complete with gradual timelines, and were supported by advocacy materials.

Sri Lanka also made significant strides in promoting healthier food choices. Initiatives included the introduction of Front of Pack labeling in 2020, complemented by a social media campaign aimed at educating individuals on how to interpret color-coded food labels. Additionally, regulations mandating Back of Pack nutrient labels came into effect in 2022. The country-imposed restrictions on the marketing of unhealthy foods to children, and any health or nutrition-related claims in food advertisements must receive approval from the Ministry of Health.

Sri Lanka has maintained a robust prevention package against NCDs since 2010, encompassing healthy diet counseling in healthy lifestyle clinics. The country's efforts extend to campaigns such as the national low-sodium cooking challenge and mass media initiatives via national TV channels. Promoting healthy eating in settings like hospitals and schools has been a priority, marked by guidelines for both since 2006.

These diligent endeavors in Sri Lanka have yielded tangible results. Salt intake has decreased from 10.5 gm/day in 2010 to 8.5 gm/day in 2021, and the consumption of processed foods has notably reduced from 26.6% in 2015 to 8.2% in 2021.

From Sri Lanka's success, valuable lesson that can be extracted is to sustain these achievements, it is crucial to scale up interventions across strategic directions, maintain continuous monitoring, and fortify efforts to prevent NCD risk factors, particularly at the primary healthcare level.



THAILAND: Universal Health Coverage for NCDs

Thailand has implemented substantial interventions at various levels of healthcare, creating appropriate care routes to address NCDs. These interventions span primary, secondary, and tertiary prevention strategies.

At the primary prevention level, Thailand focuses on health promotion and disease prevention. Initiatives include creatine screening for diabetes and hypertension patients to prevent chronic kidney disease, cardiovascular disease risk assessment, HPV vaccination for female students in fifth grade and above, HPV DNA testing, and HCV treatment with Sofosbuvir/Velpatasvir medication to prevent HCV-induced malignancy.

Secondary prevention efforts involve population-level screening for diabetes and hypertension, behavior modification for individuals at prediabetic and prehypertensive stages, and home blood pressure monitoring. Opportunistic blood pressure screening is conducted for all individuals visiting healthcare facilities. Additionally, Thailand emphasizes early detection of oral, cervical, and colon cancer.

At the tertiary prevention stage, Thailand screens for complications related to diabetes, such as diabetic retinopathy, foot ulcers, and chronic kidney disease. The country also conducts BRCA1 and BRCA2 gene detection for breast cancer patients and provides management for myocardial infarction (MI) and stroke through Acute STEMI and Stroke fast track programs. Thailand offers community chronic kidney disease (CKD) clinics and hemodialysis services, along with various healthcare services, including telemedicine, medical dispensing at community pharmacies, mechanical thrombectomy, cancer policies, and bone marrow transplants for leukemia patients.

Thailand displays a significant number of people undergoing diabetes and hypertension screening, with a substantial portion achieving successful control over their conditions. A mobile application facilitates the screening process, and the availability of essential medications and technological advancements supports extensive NCD coverage among the population.

To maximize the impact of NCD services, Thailand collaborates with local governments, establishes essential NCD services in primary healthcare, and monitors screening performance at the municipal level. The key takeaways for other countries include leveraging technology, particularly digital health, for accelerating NCD service performance, engaging local governments for shared goals and resources, and implementing a three-tiered healthcare system involving health volunteers, primary healthcare professionals, and physicians to achieve maximum coverage and impact.



TIMOR LESTE: Implementation of fiscal measures for risk reduction

In Timor-Leste, tobacco use is a significant health concern, with 70% of adult males and 42% of male adolescents being smokers. Additionally, nearly half of adolescents in the country consume carbonated drinks, with 17.2% of students reporting daily consumption of these sugary beverages two or more times a day.

To address the burden of tobacco use, Timor-Leste has implemented several measures -the country increased the import tax on tobacco from \$19/kg to \$100/kg, nearly a five-fold increase, policy briefings to the Ministry of Finance and the National Parliament Commission F on the importance of increasing taxes on tobacco, sugary beverages, and alcohol. Timor-Leste introduced Decree Law Number 14/2016 in June 2016, which serves as the primary law governing tobacco control in the country. This law includes

provisions for establishing smoke-free areas, restrictions on tobacco advertising, promotion and sponsorship, and requirements related to packaging and labeling.

To address the issue of unhealthy diets, especially the high consumption of sugary foods and beverages, the Ministry of Finance took action by increasing taxes in 2023. The tax increases for sugar beverage: \$3.00 per liter and food with added sugar: \$1.00 per kilogram

The key lessons learned from Timor-Leste's efforts includes CSOs and local media play pivotal roles in advocating for policy changes, serving as catalysts in raising awareness and garnering public support for health-related initiatives. Timing also significantly influences the effectiveness of advocacy efforts; for instance, in Timor-Leste, the COVID-19 pandemic created a strategic entry point for discussions concerning health policies. Furthermore, evidence-based advocacy is imperative, with surveys, civil society monitoring reports, and health expenditure data serving as critical resources to substantiate the need for policy alterations. These elements collectively underpin the successful implementation of health policies and taxation changes.



Progress update on NCD risk factors prevention

With the exception of tobacco control, most of the targeted risk factor reductions in the region are not on track to be achieved. The Global NCD Action Plan, specifically Appendix 3, provides updates on cost-effective measures for risk reduction. Technical packages guide countries in implementing interventions within their national contexts, on tobacco control (MPOWER), reducing salt use (SHAKE), eliminating trans fats from foods (REPLACE), reducing indoor air pollution (CHEST), promoting physical activity (ACTIVE), and alcohol harm reduction (SAFER).

All countries in the South-East (SE) Asia Region are actively implementing WHO's MPOWER package for tobacco control. Notable achievements include the establishment of completely smoke-free public places in Nepal and Thailand, as well as India's high level of success in tobacco cessation. Additionally, the region has performed well in implementing large graphic health warnings in Bangladesh, India, Nepal, Sri Lanka, Thailand, and Timor-Leste. Thailand has also introduced plain packaging for tobacco. Comprehensive bans on all forms of tobacco advertising, promotion, and sponsorship (TAPS) are in place in only Maldives and Nepal. Identifying gaps and expediting the implementation of WHO's MPOWER strategy are critical steps, as is the monitoring and regulation of new and emerging tobacco and nicotine products.

In SE Asia Region, high sodium and low-fiber diets are major contributors to the burden of cardiovascular disease (CVD) resulting from dietary risk factors between. While Bangladesh, India, Thailand, and Sri Lanka have adopted best practice policies for eliminating trans-fatty acids, there is a need to accelerate monitoring and evaluation efforts. Sodium intake remains high in the region, and draft sodium benchmarks for packaged foods are available. Furthermore, more than 25.2 million children aged 10 to 19 years in the Region are affected by obesity. The WHO Acceleration Plan to Stop Obesity is designed to stimulate and support multi-sector country level action. Several countries are implementing measures to reducing harm from alcohol using the WHO SAFER package. Actions to tackle physical inactivity are in early stages and are guided by the regional roadmap to implement the global action plan on physical activity.



Progress update on NCD management

NCDs continue to be the primary cause of both mortality and morbidity in the region. CVDs stands out as the leading cause of death, followed closely by chronic obstructive pulmonary disease (COPD), cancer, and diabetes. The care cascade for hypertension and diabetes paints a concerning picture, with nearly half of individuals with elevated blood pressure or glucose levels not receiving treatment, and control rates for hypertension below 12%. Progress in integrating NCDs into essential service packages for Universal Health Coverage (UHC) has fallen short of expectations, and these conditions are also a significant driver of out-of-pocket healthcare expenses. The COVID-19 pandemic has further exacerbated the situation for people living with NCDs, affecting all phases of care, from higher case fatality rates to delayed treatment and diagnosis.

The WHO PEN Package for primary health care serves as a framework for strengthening the integrated management of NCDs at this level of care. Since its introduction in 2022, several guidelines and technical documents have been published, with recent additions including guidelines for pharmacologic treatment of hypertension and for elimination of cervical cancer. The WHO PEN package offers a simplified approach to managing four common NCDs alongside health counseling, self-care, and palliative care. The WHO HEARTS technical package provides a strategic approach to improving cardiovascular health in countries. The adaptation of the WHO HEARTS package at the country level has shown improvements in disease outcomes. The use of simplified protocols, team-based care, monitoring systems, and the availability of drugs have nearly doubled the control rates for hypertension among 9 million people put on standard care.

The SEAHEARTS Initiative adapting WHO HEARTS elements in the South-East Asia Region was introduced on World Heart Day 2022 as a response to accelerate the efforts in countries for the prevention and control of CVDs. A significant development is the update of Appendix 3 aimed at further supporting the NCD Implementation Roadmap 2023–2030 for the global action plan for the prevention and control of NCDs 2013–2030 (decision WHA75(11)). In the 2022 update, a total of 90 interventions and 22 overarching/enabling actions are included. A total of 58 interventions were considered in the cost-effective estimation with 28 being considered most cost-effective and feasible for implementation with an average cost-effectiveness ratio of \leq Int\$ 100 per healthy life year (HLY) gained in low- and lower-middle-income countries.

The introduction of the Global Diabetes Compact aims to assist countries in reducing the risk of diabetes and ensuring that all diagnosed individuals have access to affordable, quality treatment and care. These targets align with efforts already underway at the country level in the Region.

In 2020, WHO in collaboration with national institutes started providing support to improve stroke care services in Bhutan, Maldives, Myanmar, and Timor-Leste, which was later expanded to Nepal and Sri Lanka. The programme is supporting countries to strengthen stroke management and referrals through the development and training of multidisciplinary teams consisting of doctors, nurses, and rehabilitation therapists.



SESSION 2

WHO SEAR NCD Impact Simulation Tool for prioritization of NCD



The objectives of the session were to orient participants on the WHO SEAR NCD Impact Simulation tool and provide hands-on training to use the tool in the country context. The session was aimed to support programme managers to identify interventions that can be prioritized and accelerated in the local context and deliberated on opportunities and measures to scale-up based on information generated from simulation tool. The demonstration of the session was done by the Dr David Watkins and the session was moderated by Dr Cherian Varghese.

The NCD Impact Simulation tool (<https://apps.searo.who.int/whoroad/south-east-asia-region-ncd-impact-simulation-tool>) is based on available data and uses a modeling approach to see the impact of an incremental increase in the implementation of interventions for NCDs and their impact on SDG 3.4.1, premature mortality reduction by one-third by 2030 in a country setting.

The tool is designed to model the effect of 25 interventions (table 1) broadly divided into three categories – Intersectoral policies for risk factors reduction, primary care clinical interventions, and advanced care clinical interventions.

Table 1 Interventions that are built into the WHO SEARO Impact Simulation Tool

Intersectoral policies	Primary care clinical interventions	Advanced care clinical interventions
Alcohol intersectoral policies	Aspirin for suspected ACS	Acute treatment of stroke
Alcohol tax	Asthma/COPD acute treatment	Heart failure acute treatment
Tobacco intersectoral policies	Asthma/COPD chronic treatment	Management of acute ventilatory failure
Tobacco tax	Cervical cancer screening/CIN treatment	PCI for ACS
Trans fat elimination	Treatment of hypertension	Treatment of early-stage breast cancer
Sodium reduction	Treatment of hyperlipidemia	Treatment of early-stage cervical cancer
	CVD secondary prevention	Treatment of early-stage colorectal cancer
	Diabetes screening/treatment	Treatment of oral cancer
	Heart failure chronic treatment	
	Pulmonary rehabilitation	

It has two basic domains - Coverage is the extent an intervention or policy is implemented and Impact = cause/age specific mortality * coverage * effect size. The tool offers several strengths that enhance its utility for health planning and decision-making. It relies on evidence-based recommendations derived from the Disease Control Priorities drawing upon the expertise of a large number of authors and peer reviewers. This ensures that the interventions it recommends are firmly grounded in scientific evidence and expert consensus. The tool boasts a user-friendly interface, making it accessible to a diverse range of users, including policymakers and program planners.

Countries got firsthand learning experience on key five outputs of impact simulation tool are i) Premature NCD mortality,ii) Intervention impact,iii) Intervention costs,iv) Deaths averted by cause, v) Intervention cost-effectiveness. The countries also got exposure to simulate the impact of single or a combination of the above interventions in a country context to answer

- What percent of premature mortality from NCDs can be reduced if adopting different interventions and policies?
- What types of interventions and policies could be adopted to achieve SDG target 3.4 (reduction in premature mortality from NCDs)?
- How many deaths can be averted by adopting specific interventions and policies?
- What is the total cost for adopting each intervention?
- What is the cost effectiveness (USD/Disability Adjusted Life Year averted) of each intervention if adopted?

As a group, countries have identified 10 of the top intervention priorities in respective country and then used the tool to calculate the cost, impact, and cost-effectiveness of a package containing these interventions.



SESSION 3

Addressing NCD in as an integral part of the response to emergencies



The objectives of the session were to orient participants on different approaches to address NCD prevention and management services as integral part of emergency response plan. The session was aimed to understand on why and how NCD services need to be addressed during and after emergencies; how to deliver such priority services, and where to get technical backstopping.

The experience of Cox's Bazar interventions was presented by Dr Robed Amin, DGHS, Bangladesh, Dr Md Mahbudur Rahman, Cox's Bazar and WHO team Cox's Bazar. The global landscape findings and experience of WHO was presented by Dr Kiran Jobanputra, WHO HQ. Ms Sarita Nair from India and Dr Phanindra Prasad Baral from Nepal jointly chaired the session.



Towards a model for service delivery for NCD prevention and management in humanitarian settings : Experience from Cox's Bazar, Bangladesh

In 2017, a massive exodus occurred, forcing nearly one million Rohingya from Myanmar's Rakhine State to seek refuge in Bangladesh's Cox's Bazar region. Among these displaced individuals, 44% were adults, with females accounting for 51% of the population. To address the urgent healthcare needs of this vulnerable population, a substantial healthcare infrastructure was established, along with 73 Health Posts, 45 Primary Health Centers, 3 Maternity Hospitals, and 8 Secondary Care Hospitals, primarily located across 33 temporary shelter camps in Ukhiya (26 camps) and Teknaf (7 camps).

An initial assessment using WHO STEPs survey approach revealed significant demands for NCD services, as well as mental health and psychosocial support (MHPSS), for both the Rohingya population in the camps and the local host population. Findings indicated a prevalence of hypertension at 14.5% (with rates of 9.3% among men and 19.7% among women), diabetes at 8.4% (6.3% among men and 10.5% among women), and tobacco consumption in any form at 59.6% among men and 28.3% among women. Several challenges were identified, including the absence of public health evidence on the burden of NCDs, knowledge gaps among healthcare workers regarding NCD management, limited access to NCD diagnostic equipment and essential medicines, non-uniformity in standard treatment guidelines and practices, and a lack of standardized recording and reporting formats.

The response to these challenges was rapid and comprehensive. In 2017, NCD services were included in minimum essential services for emergencies. In 2018, a dedicated NCD project was launched, featuring Package of Essential Noncommunicable Diseases (PEN) training and the inclusion of NCD indicators in the District Health Information System 2 (DHIS-2). From 2020 to 2023, efforts were made to repurpose staff, address diagnostic and medicine gaps, introduce NCD registers, initiate supportive supervision, and strengthen the laboratory capacity for NCDs.

In the realm of mental health, 18 rounds of mhGAP training were conducted, resulting in the training of 696 healthcare workers. Field supervision visits were carried out, training materials were translated into the local language, and technical support was provided for the implementation of a finalized MHPSS strategic plan for 2022.

Looking ahead, the Cox's Bazar team plans to collaborate with contractual partners to enhance capacity building and supportive supervision, improve reporting and recording mechanisms, establish a digitalized NCD reporting system, conduct community screenings for hypertension and diabetes, and upgrade the capacities of existing laboratory services in the camps. These actions aim to address the ongoing challenges posed by the protracted emergency.

However, a significant funding gap remains a major challenge. Currently, approximately 90% of health facilities measure blood pressure at triage, conduct 10-year cardiovascular disease risk assessments

for all patients aged 40 and above, and adhere to national protocols for NCD treatment. Additionally, 40% of medical doctors, 35% of medical assistants, and 16% of nurses have received training in PEN. Health promotion materials on healthy lifestyles have been developed and distributed to Rohingya patients through Primary Health Care facilities. In 2022, over 310,000 consultations were provided for hypertension and diabetes out of a total of 440,000 consultations in the FDMN camps.



Findings of the global landscape and experience of WHO from other regions on NCDs in emergencies

The last few years have demonstrated the deadly consequences of two pandemics coinciding. Not only an issue of avoidable mortality, but also health equity, health security and capacity of systems and individuals to adapt and respond to all hazards. WHA75 recognized the need and positioned NCD in humanitarian settings on the global health and security agenda, as 'design and implementation of policies, including those for resilient health systems and health services and infrastructure to treat people living with noncommunicable diseases and to prevent and control their risk factors in humanitarian emergencies'

WHO has developed NCD Emergency Kits which are consolidated set of products for use in cases of emergencies, when regular supply is disrupted. With extensive consultation with member states the NCD emergency Kits were revised in 2022, the purpose was to focus primarily on most common NCD amenable to PHC management. Each NCD kit targets to cover a population of 10,000/ 3 months and is intended for its in primary health care setting only. Revised NCD Kit content includes:

- Basic module medicines: medicines to treat diabetes, hypertension, cardiovascular disease, and chronic respiratory diseases, also some drugs for mental health and epilepsies
- Cold chain medicines: 3 types of insulin (long, rapid and mix 70/30), Glucagon hypo kit, Insulin syringes
- Equipment: glucometer, stethoscope, otoscope, ophthalmoscope, peak flow meter, thermometer, blood strips.

Findings from a landscaping review on NCDs in humanitarian emergencies, involving a desk review and a 8 country case studies (Syria, Bangladesh, Philippines, Ethiopia, Yemen, Ukraine, Venezuela, Afghanistan) were presented. The review was based on in-depth interviews with WHO NCD, Health Systems Strengthening (HSS), and Health Emergency (WHE) staff at national, regional, and HQ levels, as well as global health cluster members.

The main recommendations emerging from this review for strengthening the integration of NCDs in humanitarian emergencies include:

Leadership, Collaboration, and Advocacy: Develop and implement legislation to ensure that refugees, displaced people, and those living in humanitarian crises have access to full Universal Health Coverage (UHC) benefits packages, including NCD care. Consider people with NCDs as a vulnerable group, and foster collaboration between health systems and health emergency communities to include them in emergency preparedness and business continuity plans.

Information, Data, and Research: Review and improve the integration of NCDs in health information systems, including facility based NCD data collection. Ensure familiarity with procurement processes for NCD kits so that they can be rapidly ordered in the event of an emergency.

Service Delivery and Health Workforce: Provide ongoing training based on context-specific adaptation of WHO packages and tools (e.g., WHO Package of Essential NCD Interventions – PEN and HEARTS),

including the use of digital tools and telemedicine for follow-ups. Where there are health workforce shortages, consider task-shifting or task-sharing to ensure uninterrupted service provision. Utilize online training, including on self-care. Adapt and implement WHO operational guidance (e.g., guidance on maintaining essential health services during the COVID-19 pandemic) to support national emergency responses.

Medicine Products and Technologies: Ensure the adequacy of buffer stocks at both the national and facility levels, determined by patient registers and STEPS data. Maintain familiarity with procurement processes for NCD kits so they can be rapidly ordered in an emergency. Collaborate with suppliers and the private sector on contingency planning and scaling up production to maintain supplies in the event of service disruption.

Community Participation: Ensure the inclusion and participation of people living with NCDs in emergency response programming throughout the cycle, including beneficiary feedback mechanisms.

To further strengthen NCD responses in emergencies, WHO has planned the following:

- Regional meetings and webinars leading up to a Global High-level meeting in February 2024, with support for the development of regional frameworks where needed.
- Development of a WHO NCD operational manual in 2023, to be piloted in 2024.
- Revision of the NCD kit and development of procurement and deployment guidance.
- Creation of a rapid NCD needs assessment tool.
- Development of a training package on NCDs in emergencies aligned with WHO PEN and the NCD kit.
- Operational reviews of WHO support for NCD responses, including the NCD component of COVID-19 Strategic Preparedness and Response Plans with a focus on Pillar 9.

SESSION 4

Reducing gaps in cancer care in South-East Asia Region



The objectives of the session were to identify priority areas of intervention for improving availability and access to services across cancer continuum in the region and to discuss on the possible ways to utilize regional platforms to help strengthen services for cancer care in the region.

Dr Bishnu Rath Giri, WHO SEARO presented on the Updates on Cancer control in the region and about SEACan Grid. Dr C S Pramesh (virtual participation), Dr Girish Chinnaswamy from India presented the topic experience of National Cancer Grid, India. The session was chaired by Dr S Sridharan from Sri Lanka and Dr Adelia Maria Moniz Barretor from Timor Leste.

A panel discussion with cancer focal points from countries was organized after plenary presentations. The panel discussion was moderated by Dr Roberta Sequeira Ortiz WHO HQ, Dr Bishnu Rath Giri, WHO SEARO.



Updates on Cancer control in the region and about SEACan Grid

The South-East Asia Region is grappling with a significant cancer burden, with approximately 2.25 million new cases reported every year. Alarming statistics reveal a 33% rise in cancer-related deaths in the region during the period from 2010 to 2020. The risk of succumbing to cancer before the age of 75 stands at a concerning 7.8%. Breast cancer emerges as the most prevalent cancer type in the region, followed by cervical cancer and lung cancer. Fortunately, a majority of regional countries (90%) report having facilities for cancer surgery, pathological services, and chemotherapy. The mortality to incidence ratio for the region stands at 64.3%, about one and a half times higher than the high-income countries, thus indicating the need for strengthening cancer management capacity.

In response to this escalating crisis, the South-East Asia Region has proposed the establishment of the South-East Asia Cancer Grid (SEACan Grid). This initiative is driven by several factors: the growing cancer burden, limitations in cancer service provision by individual institutions, the potential for capacity building through collaboration, and the pressing need for coordinated patient care and technical support. Additionally, late-stage cancer diagnoses, overcrowding of tertiary care centers, the absence of standardized treatment protocols, and disparities in treatment quality across institutions further underscore the need for a collaborative approach.

The SEACan Grid aims to enhance cancer control capacity in the WHO South-East Asia Region, drawing inspiration from the National Cancer Grid in India and the experience of the Childhood Cancer Network. This initiative leverages the power of networking among institutions, creating a platform for knowledge and experience sharing among professionals involved in cancer management. It seeks to establish evidence-based standard care, promote continuous professional development and training in various aspects of cancer control.

To address the substantial issue of cancer in the region, several priorities are outlined, including strengthening tobacco control, widespread vaccination against HPV and hepatitis, achieving high participation rates in cervical cancer screening (over 70%), prioritizing early diagnosis and treatment for curable cancers like childhood cancers, and providing palliative care for all cancer patients.

Progress is being made in the region, with eight countries now having population-based cancer registries (PBCRs). Three countries, namely Myanmar, Nepal, and Sri Lanka, are being targeted for childhood cancer initiatives. Ten out of the region's 11 Member States offer tertiary care services for cancer diagnosis and treatment, including surgery, chemotherapy, and radiotherapy.

Regarding HPV vaccination, HPV1 coverage is higher than HPV2 coverage, and there is a recommendation to shift to a one-dose schedule to potentially increase coverage rates. Notable achievements have been

made by Bhutan, which has consistently achieved over 90% coverage since 2017. Maldives, Sri Lanka, and Thailand have also reported relatively high coverage rates but faced delivery challenges during the COVID-19 pandemic.

The Regional Childhood Cancer Network, along with participating institutes, has made significant strides in improving the quality of childhood cancer care and has supported improved care for over 4,000 children with cancer in last one year. Key focus areas include virtual tumor boards, health professional training, horizontal collaboration, and pathology quality assurance.

Experience of National Cancer Grid, India

The National Cancer Grid (NCG) in India was established by Tata Memorial Hospital (TMH) after recognizing that a substantial number of patients visiting TMH were from far stretches of India and often discontinued their cancer treatment due to various challenges. NCG carries out joint activities including resource-stratified guidelines, virtual tumor boards (VTBs), web-based expert opinion service, Quality Assurance Programmes, training in research methods, and collaborative multicentric research. It also operates portal for expert opinion on treatment decisions. NCG currently has close to 300 institutions and together they provide treatment to more than 750,000 new patients annually.

Additionally, the National Cancer Grid conducts health technology assessments to evaluate various interventions, further optimizing cancer care in the country. It supports an institutional peer review mechanism aligned with global standards and implements external quality assurance mechanisms to continually improve the quality of cancer care.

The NCG has also played a pivotal role in negotiating cancer drug prices by way of centralized procurement, resulting in substantial reductions ranging from 23% to 99%. This has made cancer treatment more affordable and accessible to patients.

The future of the National Cancer Grid includes the integration of data collection and aggregation into a National Cancer Database, the establishment of rare cancer registries, and collaboration with Google and Microsoft on digital health initiatives.

Improving cancer care services in countries: Panel discussion

A panel discussion was conducted among the national Programme managers or focal points for cancer care among the participants to share the experiences of the Countries on challenges they face in provision of cancer care services. They also reflected on the advantages of the proposed SEACAN Grid to overcome the challenges. The country-wise summary of the discussion is presented below.

Bhutan: Challenges include resource constraints, such as human and financial resources, capacity building for cancer management, and coordination for prevention and palliative care. Access to palliative care is a challenge. SEACANGrid can assist in data sharing and learning from best practices to improve cancer care.

Bangladesh: Bangladesh faces challenges in human resource development for the rising cancer burden. The country lacks an accurate cancer registry, and the quality of cancer diagnosis, particularly histopathology, needs improvement. The number of oncologists is insufficient. SEACANGrid can support knowledge sharing.

India: While cancer diagnosis is not an issue, treatment remains a significant challenge due to limited access to radiotherapy and other treatment modalities and a shortage of trained personnel. The country has a functional cancer registry program, but the treatment gap is a major concern.

Indonesia: Indonesia is addressing service gaps in primary healthcare and community-based care, especially in palliative care. The integration of palliative care into home visits is feasible, and education for caregivers and families is essential. SEACANGrid can provide guidance on setting up pain relief systems and advocate for improved morphine availability.

Maldives: Primary healthcare interventions at the island level are essential. Capacity building and early cancer screening are priorities. External referrals for cancer treatment, which can be expensive, are common due to a lack of local resources. Proper cancer registry functionality is also necessary.

Myanmar: Myanmar initiated a Childhood Cancer Initiative in 2019, connecting hospitals for referral and shared care. The network has been crucial in sustaining services during humanitarian emergencies.

Nepal: Nepal has a cancer registry and an informed policy based on data. Community engagement through healthcare workers and female community health volunteers has been effective in collecting reliable data. Public and private hospitals actively participate in data collection.

Sri Lanka: Economic challenges have impacted access to cancer care and drug availability. While Sri Lanka provides free cancer care, procurement delays due to economic crises have been problematic. SEACANGrid can assist in pooled procurement and reducing delays.

Thailand: Thailand established a National Cancer Control Program in 1997, and significant progress has been made in decentralizing cancer care to regional centers. Collaboration with stakeholders, including village health volunteers, has contributed to successful primary prevention and screening.

Timor Leste: Timor Leste faces challenges in cancer mortality and limited screening. HPV vaccination discussions are ongoing, and there is a lack of specialists in tertiary hospitals. SEACANGrid can help with capacity building and the development of a national cancer strategy.

These country-specific challenges and initiatives highlight the importance of regional collaboration through SEACANGrid to improve cancer care, share knowledge, and address common issues in South-East Asia.

These key points highlighted by countries underscore the multifaceted nature of cancer management, highlighting both its challenges and opportunities. The rising incidence of cancer poses a significant challenge to healthcare systems worldwide. However, childhood cancer, when addressed early, offers a unique opportunity to enhance cancer care outcomes. Bridging the research gap, especially in developing countries, is essential to ensure that cancer management meets the specific needs of diverse populations. Conducting clinical trials in these regions can open doors to innovative treatments and therapies.

Establishing uniform cancer care practices and fostering collaboration among various institutes and stakeholders can significantly enhance the quality of care. Tailoring cancer care to the available resources and infrastructure in each region is essential for efficient management.

In conclusion, addressing cancer's multifaceted challenges and seizing its opportunities require collaborative, innovative, and data-driven approaches in both developed and developing countries.

SESSION 5

Systems for monitoring NCD services in primary health care



The objectives of the session were to orient participants about facility-based monitoring core and optional indicators for hypertension and diabetes management, monitoring tools. The session aim was to provide overview of digital solutions that can facilitate facility-based monitoring of NCD management and to discuss monitoring systems for NCDs, plan to initiate/expand facility-based monitoring of hypertension and diabetes at country level.

Dr Taskeen Khan, WHO HQ and Dr Pradeep Joshi, WHO SEARO jointly presented on facility-based monitoring indicators and application for hypertension and diabetes. Mr Eshan Nanda, Dell Technologies provided brief on digital solution and use of technology to support monitoring of NCD services at primary health care and Dr Sohel Reza Choudhury, Bangladesh presented on Outcome-based monitoring and evaluation approach example from Bangladesh.

After the plenary presentation, a country poster presentation session was organized where countries present the systems adopted for NCD monitoring at present and the future plans. The session helped countries to exchange their implementation experience with each other.

The session was chaired by Mr Hassan Mohamed from Maldives and Dr Theresia Sandra Diah Ratih from Indonesia.



Facility based monitoring indicators and application for hypertension and diabetes

Monitoring is a continuous process involving the collection, management, and utilization of information to evaluate whether an activity or program is progressing as planned and achieving its defined objectives.

For effective NCD monitoring, it is crucial to establish clear outcomes, along with a set of core indicators and targets. These indicators should provide governments and partners with timely and accurate data to assess progress, conduct performance reviews, engage in policy dialogue, and make informed decisions. While inputs and processes can be monitored through rapid reviews, facility assessments are more suitable for monitoring outputs and outcomes.

The NCD monitoring cycle typically involves data collection on predefined standardized indicators, followed by data analysis, interpretation, and the implementation of necessary actions based on the collected data. Adjustments to the program can be made if required, and the data can be instrumental in shaping future planning and interventions.

WHO has developed various guidelines for facility-based monitoring, including the HEARTS System for Monitoring. Hypertension and diabetes key performance indicators were framed to enhance the quality and coverage of services. Monitoring healthy facility indicators relies on management records, assessment tools, registers, summary reports, and clinical audit tools. The monitoring process can be carried out at different levels, including individual monitoring (patient data review), facility-based monitoring (quarterly reports on indicator sets), district-level monitoring (comparing facility performance within districts), and national-level monitoring. Longitudinal monitoring, particularly for conditions like hypertension and diabetes, involves continuous or repeated monitoring of health outcomes.

It is essential to strike a balance between collecting comprehensive data and not overburdening healthcare workers. Monitoring should focus on collecting data that is meaningful for policy planning and interventions. Given the chronic nature of NCDs, aggregate patient data or visits alone are insufficient to assess program performance. Population-level surveillance data also may not provide the granularity needed to improve individual patient outcomes and facility-level performance. For instance, in hypertension management, the control rate serves as a straightforward indicator of patient and program performance.

The Noncommunicable disease facility-based monitoring guidance (<https://www.who.int/publications/i/item/9789240057067>) organizes indicators based on a results chain (inputs/processes, outputs/outcomes) and monitoring domains, emphasizing the health system's orientation. These domains include program determinants (system capacity and management), service delivery (early detection, diagnosis, treatment, and complication assessment), and program objectives (disease control). Each indicator is accompanied by metadata that includes its definition, purpose, numerator, denominator, calculation method, aggregation, disaggregation, sources of data, key data elements, frequency of reporting, users of data, limitations/comments, and related links. For hypertension and cardiovascular diseases, there are more than four core indicators and eight optional indicators, while for diabetes, there are four core indicators and 14 optional indicators. Countries can select core and optional indicators based on their available resources and facility types.

The WHO SEARO online course titled 'HEARTS on NCDs- an integrated approach to management of NCDs in PHC' offered on the Open WHO platform has a module on Monitoring NCD services in PHC to explain some of these core indicators, aiming for uniformity and standardization to assess program performance. .



Digital solution and use of technology to support monitoring of NCD services at primary health care

Leveraging digital solutions and technology plays a vital role in advancing the monitoring of NCD services at the primary healthcare level. Technology offers the potential to accelerate progress toward achieving developmental goals, as demonstrated by Thailand's National Digital ID system, which encompasses digital infrastructure for identity verification and data sharing. It has enabled the digitization of payments through QR codes, reducing the reliance on cash handling. Additionally, platforms like Satu Sehat contribute to integration and standardization efforts.

However, several challenges persist in adopting technology for healthcare monitoring. Manual registers remain prevalent and are prone to human errors, time-consuming, and often lack timely data updates. They also fail to provide drug inventory linked to patient data. Weak public infrastructure and inadequately trained workforces further impede efficient data handling.

Nevertheless, digital public infrastructure and digital public health goods are transforming the ecosystem. This includes mobile and cloud-based analytical tools, open-source technologies, adherence to interoperable standards, and design blueprints, all of which grant access to information at one's fingertips.

The digital solution for monitoring NCDs across primary healthcare visits is characterized by several key features. It incorporates unique health IDs, enabling the generation of longitudinal health records. Other attributes encompass offline data collection, support for local languages, screening referrals and treatment features, quick retrieval of patient data, clinical decision support systems, in-built analytics for actionable insights, and an intuitive user interface. This system facilitates seamless connectivity between community health workers, staff nurses, medical officers, program managers, and patients.

The digital health system should capture essential data while linking patient information with facility data to enable tracking and monitoring of missed visits and follow-ups. It should also generate drug stock management based on registered patients and treatment protocols. Additionally, it should be capable of self-analysis, providing the ability to dissect data across multiple dimensions and generate predefined and user-initiated reports. Moreover, it should be equipped for email scheduling and report generation.

From an infrastructure perspective, a country managing a population of 10 million would require eight medium-sized servers, a 1 TB data backup machine, and a storage speed of 300 Mb/s (SSD). This is in addition to the availability of devices at the facility level, security features within the technology solution, and an in-built monitoring system to assess performance.

Human resources are also essential, necessitating field support staff, deployment teams, technical support teams for troubleshooting, and software teams. India serves as an exemplary case with its National NCD portal, boasting over 443 million enrollments, more than 33 million digital IDs functioning seamlessly in both public and private sectors, and the training of more than 225,000 healthcare workers, alongside the registration of user IDs.



Outcome- based monitoring and evaluation approach example form Bangladesh

The Bangladesh Hypertension Control Initiative, launched in 2018, is a collaborative effort between the Non-communicable Disease Control Programme of the Directorate General of Health Services (DGHS), the Ministry of Health and Family Welfare (MOHFW), the National Heart Foundation of Bangladesh, and Resolve to Save Lives, USA. Its primary goal is to enhance the detection, treatment, and follow-up of hypertension PHC levels by implementing the HEARTS package.

In Bangladesh, hypertension affects approximately 21% of adults, with only 50% of them being diagnosed and a control rate of less than 14%. This initiative is being expanded to 54 subdistrict health facilities, covering a population of 1.15 million. Alongside a straightforward management protocol, consistent medication supply, and team-based care, a pivotal component is the utilization of a digital app known as the Simple app for outcome-based monitoring.

Over 5,050 healthcare providers have received training in the use of this digital solution. The app has greatly aided in monitoring follow-up visits and tracking blood pressure control. Its simple dashboard enables managers to oversee progress comprehensively at a glance. The Simple app is currently in use at 182 Upazila Health Complexes and 4 Sadar Hospitals in Bangladesh, revolutionizing the management of hypertension and diabetes.

Some notable features of this digital application include the ability to access patient records and record clinical data in under 20 seconds, thus allowing more time for direct patient care. It consumes minimal data and storage space while ensuring high data security through offline storage.

The impact of the digital application is evident in the data: a pre/post-comparison of blood pressure control rates before and after the implementation of the Simple app showed a significant increase, from 20% before its introduction in February 2020 to 39% in August 2020 and exceeding 60% by August 2022. Additionally, utilizing the app's overdue list and secure calling features to contact patients overdue for care resulted in a decrease in the three-month loss to follow-up, dropping from 50% to 26% after six months.

Programme managers can effectively track cohort reports and download patient line lists for monitoring and evaluation. Furthermore, the application sends reminder messages to patients in the local language about their follow-up visits. The integration of treatment protocols with drug management has significantly improved the availability of medicines at healthcare facilities. Presently, more than 282,152 patients with hypertension and diabetes are managed through this digital application, and it is now linked to the DHIS-2 platform of the national data. The success of NCD monitoring through this digital application lies in its minimal data collection and identification of the most important indicators, making it an indispensable tool in the fight against hypertension and diabetes in Bangladesh.



Systems for NCD monitoring at country level: Poster presentations

Across various countries, there are significant efforts to implement digital monitoring systems for Non-Communicable Diseases (NCDs) at different levels of healthcare.

Bangladesh: Bangladesh has embarked on the implementation of a digital monitoring system for NCDs across various district-level projects. These initiatives, including BUHS, ICCDR'B, Simple app, and BIRDEM, are aimed at assessing and closely monitoring NCD conditions at both the community and healthcare facility levels. Notably, there is an ongoing transition from paper-based documentation to digitalization, marking a significant advancement in healthcare data management.

The digital monitoring system places considerable emphasis on tracking key indicators related to NCD management. These indicators include the enrollment of patients, the diagnosis of NCDs, the status of patients undergoing treatment, the extent of disease control, as well as monitoring missed appointments and patients who are lost to follow-up, particularly for hypertension and diabetes.

One of the strengths of this system is its ability to establish a seamless connection between various healthcare facilities, ranging from community clinics to Upazila Health Complexes, district-level hospitals, and even specialized tertiary care hospitals. This interconnected approach ensures that patient data and healthcare information can flow efficiently across different levels of care, facilitating timely interventions and coordinated healthcare services.

Bhutan: Bhutan uses various platforms for NCD monitoring, including DHIS-2, the SCCI reporting system, and an electronic Patient Information System (ePIS). These systems generate reports on NCD caseloads, hypertension control rates, risk assessments for cardiovascular diseases, and more. The country also conducts the WHO STEPS survey for NCD monitoring.

Indonesia: The Indonesian Ministry of Health has introduced an innovative healthcare initiative called the Indonesia Health Service (IHS), known as SATU SEHAT. This platform aims to revolutionize public health services by establishing a robust, resilient, and integrated health information system. SATU SEHAT serves as a unified platform for standardizing health data services in Indonesia, encompassing patient medical records, data connectivity, analytics, and various tools to facilitate seamless integration between healthcare applications and service facilities.

One of its remarkable features is the seamless connection it establishes between primary healthcare centers, referral hospitals, pharmacies, laboratories, and radiology services, all within a single platform. Additionally, a dedicated citizen health app is provided, allowing patients to access their electronic health records for a more engaged and informed healthcare experience.

SATU SEHAT operates as an open-source platform but adheres to rigorous standards mandated by the Ministry of Health. It leverages a unique health ID for every patient, effectively eliminating redundant data entry and minimizing data duplication. This patient-centric approach enhances data accuracy and streamlines healthcare processes.

The platform has been rolled out in multiple phases, with a focus on advocating for NCD monitoring. Currently, it boasts more than five million registered hypertension patients and over 722,000 diabetic patients. The platform also contains valuable information related to cancer and cardiovascular disease (CVD) screenings. While it currently lacks outcome-based monitoring for common NCDs, there are plans to integrate this crucial feature in future phases of development, further enhancing the effectiveness and impact of SATU SEHAT in improving public health in Indonesia.



India: India implemented the National NCD Portal in 2017, which collects data at the community level through family enrollment and individual screening for five conditions. It uses a series of applications, from frontline healthcare workers to medical officers, for seamless patient care. The portal is available offline and online and supports real-time data sync. It also generates unique health IDs and links with teleconsultation platforms like E Sanjeevani.

Nepal: Nepal launched the Kavre Hypertension Initiative, training healthcare workers in Kavre district on WHO HEARTS and WHO PEN protocols. They use revised monitoring tools capturing key WHO Facility Based NCD monitoring indicators on paper.

Maldives: The Maldives has implemented a comprehensive digital health system for managing NCDs at the PHC level, which is linked to the DHIS-2 platform. This innovative approach involves enrolling individuals identified with NCDs, like hypertension and diabetes, through various screening methods such as mass screenings, medical screening camps, and specialized NCD clinics. The digital system collects crucial patient data, focusing on treatment status, disease control, and behavioral risk factors. It goes further by calculating NCD risk scores, alerting healthcare providers and patients about potential risks. Importantly, the system sends timely reminders to patients for scheduled healthcare visits, ensuring they receive the necessary follow-up care. Integration with secondary and tertiary hospitals facilitates smoother referrals for patients needing advanced treatment. The government's commitment to improving digital health infrastructure is demonstrated by the distribution of digital equipment to healthcare facilities, including computers, laptops, tablets, video conferencing systems, and printers. This data-driven approach not only enhances patient care and outcomes but also supports evidence-based policymaking, contributing to more effective healthcare services in the Maldives.

Sri Lanka: Sri Lanka adopted WHO guidelines for hypertension and diabetes management and customized the Simple App for outcome-based monitoring. Android phones were distributed to healthcare workers

and have around 3,102 registered patients. The country plan to link the app with DHIS-2.

Thailand: Thailand has implemented a comprehensive digital health system, with the HDC (Health Data Center) dashboard at its core. This web portal, developed by the Ministry of Public Health's Health Data Center, offers a wide range of health-related data and information for the country. The HDC dashboard provides access to reports on various aspects of public health, including population statistics, health personnel, health status, healthcare service utilization, disease prevention, and health promotion.

One of the key features of this dashboard is its ability to present data at different geographic levels, allowing users to drill down to specific regions, provinces, districts, or healthcare facilities. The primary objective of the HDC dashboard is to support evidence-based decision-making and policy formulation to enhance the health of the Thai population.

To feed this digital system with data, Thailand employs a network of Village Health Volunteers (VHVs) who register population-level screening data using the SMART VHV application. This data is then transmitted to primary health centers. Additionally, citizens can access this health data through the Health 4 You application.

Within the healthcare infrastructure, primary health centers are connected to small, medium, and large hospitals through systems like HOSxP (Healthcare Information System) and JHCIS (Java Health Center Information System). These systems support various functions, including patient registration, medical records management, billing, pharmacy operations, laboratory services, radiology, and more.

At the provincial level, the Health Data Center has access to data from multiple sources, including Health 4 You, Smart VHV, HOSxP, and HMIS (Health Management Information System). This interconnected digital health architecture facilitates the seamless flow of information from the community level to primary health centers, district hospitals, and provincial health offices. This interconnected system is invaluable for making informed decisions regarding the management of Non-Communicable Diseases (NCDs) and other health-related issues in Thailand.

Timor Leste: Presented on the key indicators that are being monitored at the primary health care level which are based on WHO PEN package. Almost all CHC in country have infrastructure for the data entry and dedicate person for data analysis. Doctors in the CHC are also trained to directly enter the patient information in the Saúde na Família records. Introduction of e-tracker in the HMIS and electronic system (Registro Electrónico de Saúde or RES) of Saúde na Família will help to enter and review of patient data takes place at each visit of an individual patient

The session revealed that all the countries in the SE Asia Region has adopted digital monitoring systems to some extent to monitor the spectrum of NCD services to monitor patient screening to treatment and outcome monitoring with plans for further improvements.





SESSION 6

Field Visit to observe integration of NCD services to primary health care settings in Manikganj and Observation visit to Centre for the Rehabilitation of the Paralysed



The objectives of the field visit were to demonstrate the service package of essential NCD services delivered for the prevention and management of hypertension and diabetes in the primary health care setting in Bangladesh. and to understand the different interventions outlined in the WHO Package of Essential NCD and WHO HEARTS to improve screening, detection, and management of hypertension, diabetes, and other NCDs in the primary health care setting. The visit was jointly planned by the MoHFW Bangladesh and WHO Country Office for Bangladesh.

The participants were divided into two groups. One group visited Upazila Health Complex and attached community centre in Saturaia block and other group visited similar health facilities in Singair block of Manikganj District.

The visit helped participants to understand the service delivery model, protocol-based management, access to medicines and devices, competent staff, supportive supervision, care pathway, recording and reporting, facility-based monitoring in the primary health care. The reflection from countries during the moderated discussion (after the field visit) at Upazila Health Complex helped participants to understand and cross-learn the service delivery models and essential service packages for NCDs (by taking hypertension and diabetes as a tracer) across the region.

The participants explored that community center provides basic health services such as screening of hypertension, diabetes; referral of suspected cases to next level and follow-up of registered cases. Community center also provides promotive, preventive services in the catchment population,

The Upazila Health Complex (UHC) provides range of services including screening, diagnosis, treatment, and follow-up services for common NCDs, including diabetes, hypertension, cardiovascular diseases, and chronic respiratory conditions according to Essential Health Service Package (ESP), 2016. The healthcare workforce, including doctors, nurses, and community health workers, is being trained in WHO PEN package to improve their capacity in NCD management. Training programs focus on early detection, diagnosis, treatment protocols, and patient education for effective NCD care. The use of digital health technologies, such as telemedicine and mobile health applications, is being explored to improve NCD service delivery. These technologies facilitate remote consultations, patient monitoring, medication adherence, and health education, particularly in remote or underserved areas.



Observational visit to CRP Bangladesh

The participants also got opportunity to have a visit to CRP center which is dedicated to improving the lives of people with disabilities, especially those who are paralyzed, through comprehensive rehabilitation services, education, and advocacy. It plays a vital role in promoting the inclusion and empowerment of individuals with disabilities in Bangladesh. CRP has had a significant impact on the lives of countless individuals with disabilities in Bangladesh. It has helped many people regain their mobility, access education and employment, and reintegrate into society. A wide range of services are provided by CRP that includes - Physical Rehabilitation, Prosthetics and Orthotics, Community-Based Rehabilitation, Education and training along with advocacy and awareness generation.

SESSION 7

Scaling up stroke care services and surveillance for NCDs



The objectives of the session were to provide an overview of the status of the NCDs and risk factors surveillance in the Region to demonstrate the information available through the WHO SEAR NCD dashboard; and to understand interventions for improving stroke care services and importance of stroke registries as a surveillance tool.

Dr Nalika Gunwardena, WHO SEARO presented on the Surveillance of NCDs and risk factors in South-East Asia Region. Dr Helder J N da Silva, Timor Leste described the integrated approach to NCD surveillance in Timor-Leste and Dr Jeyaraj D Pandian, India (virtual) presented on Stroke care services and surveillance.

Dr Chhabi Lal Adhikari from Bhutan and Dr Krisada Hanbunjerd from Thailand jointly chaired the session

Surveillance of NCDs and risk factors in South- East Asia Region

The session highlighted critical role of NCD surveillance as part of the third strategic direction outlined in the NCD Implementation Roadmap, which aims to promote accountability by ensuring the availability of timely, reliable, and sustained national data. The primary data needs related to NCDs within a country include understanding the burden and trends of NCDs, assessing NCD risk factors among adults and adolescents, and evaluating the health system's response to the country's NCD needs. This emphasis on data generation serves the purpose of monitoring and evaluating progress against regional and global NCD and Sustainable Development Goal (SDG) targets.

Several methods are available for conducting NCD surveillance. These methods include population-based surveys such as the STEPs survey on NCDs and NCD risk factors in adults, Global School Health Surveys focusing on behavioral risk factors among school children, the Global Adult Tobacco Survey, and the Global Youth Tobacco Survey. Additionally, facility surveys are conducted to assess NCD service availability, readiness, quality, and safety. Disease registries and facility-based monitoring systems are also instrumental in NCD surveillance.

However, conducting these surveys poses challenges, including resource-intensive requirements in terms of finances, human capital, and time. Delays in completing surveys can affect the timely use of data, and there is often insufficient focus on addressing national needs. To address these challenges, an integrated approach is recommended, combining various surveys to comprehensively cover all data requirements of a country within a single, overarching survey.

Best practices in regard to country survey, includes National Health Survey of Bhutan, which combines 13 surveys, and the planned National Survey on NCDs and NCD risk factors among adults and NCD services in health facilities in Timor-Leste. These integrated approaches aim to efficiently gather data to fulfill a country's main data needs. The surveys combine household-level assessments of NCDs, risk factors, care-seeking practices, and out-of-pocket expenditures, along with facility-based surveys on service availability and readiness for NCDs and mental health. Tools adapted from the WHO STEPS Survey and WHO Harmonized Health Facility Assessment Survey facilitate this comprehensive data collection.

WHO SAERO NCD DASHBOARD, a dynamic and interactive tool that provides access to information related to NCDs, including the probability of premature mortality due to NCDs, risk factors, and specific NCD diseases and conditions within the South-East Asia Region and its member countries. This dashboard relies on data from the WHO Global Health Observatory (GHO) and aims to provide the best estimates for specific indicators to ensure comparability across countries and time. It is based on estimates published as of December 2022.

In the ensuing discussion, key points included the use of population-based surveys to evaluate policies, the importance of utilizing a core set of questions that align with the country's specific needs, and the need for consistency in surveying risk factors among different demographic groups. These principles are fundamental to effective NCD surveillance and the development of data-driven policies and interventions.



Stroke care services and surveillance

Stroke services play a critical role in the healthcare system, with various components contributing to stroke care. These services include stroke care units, the use of aspirin and recombinant tissue plasminogen activator (rtPA), medical thrombectomy, and rehabilitation services following a stroke.

Among these services, stroke care units have the most significant population impact in terms of enabling independent survival after a stroke compared to other interventions. The stroke care pathway encompasses several steps, including prehospital evaluation based on the recognition of stroke symptoms, timely arrival at the emergency department, revascularization therapy, stroke care management, secondary prevention, and rehabilitation for stroke patients.

The World Stroke Organization provides a checklist that categorizes stroke services into advanced, essential, and minimal stroke care services based on healthcare capacity. Essential stroke services include the availability of basic diagnostic services such as ECG and CT scans, access to thrombosis medicines, interdisciplinary teams for thrombectomy, and trained nurses and physicians who can be activated upon receiving information about a stroke patient's arrival. Steps are taken both before the patient reaches the hospital and in the emergency department to reduce door-to-needle time and improve survival rates.

Various models for stroke care delivery include multidisciplinary team care with dedicated stroke care units, specialist-led care, physician-led care when a stroke care unit is not available, hub and spoke models based on telestroke facilities, and task-sharing models. WHO SEARO collaborates with institutions like CMC to develop stroke care improvement service delivery models, establish stroke registries, increase public awareness of stroke warning signs, and build the capacity of healthcare workers for stroke management. This improvement in service delivery models encompasses medical and surgical management, post-stroke rehabilitation services, and interventions for secondary prevention.

Stroke surveillance and registries are essential tools for countries to utilize data effectively. They aid in the equitable distribution of healthcare resources, assess the burden of stroke, understand stroke risk factors, design interventions, evaluate their effectiveness, and monitor trends. Registries can evolve from hospital-based (focused on core stroke data) to population-based (covering community or non-clinical events) through a step-wise approach.

Stroke registries encompass different modules, including data on hospital or healthcare facility events, core stroke data covering treatment and disability, stroke subtypes, fatal community events, and non-fatal non-hospitalized events within the community. Various methods can be employed to identify stroke patients, such as inpatient records, admission registers, outpatient clinics, discharge records, death certificates, radiology department records, physician or neurologist records, and physiotherapy records.

The applicability of both hospital-based and population-based registries in providing information on stroke epidemiology and service responses was illustrated using examples from Ludhiana's urban and rural population-based stroke registries. The hospital-based registry, involving over 7,000 patients, revealed a case fatality rate of approximately 22% and highlighted various factors influencing prognosis. Meanwhile, the population-based cancer registry covered 146 villages and a population of 244,000, with an age-standardized incidence rate of 218 per 100,000 population, providing valuable insights for policymaking and improving stroke care.



World Health
Organization
REGIONAL OFFICE FOR
South-East Asia

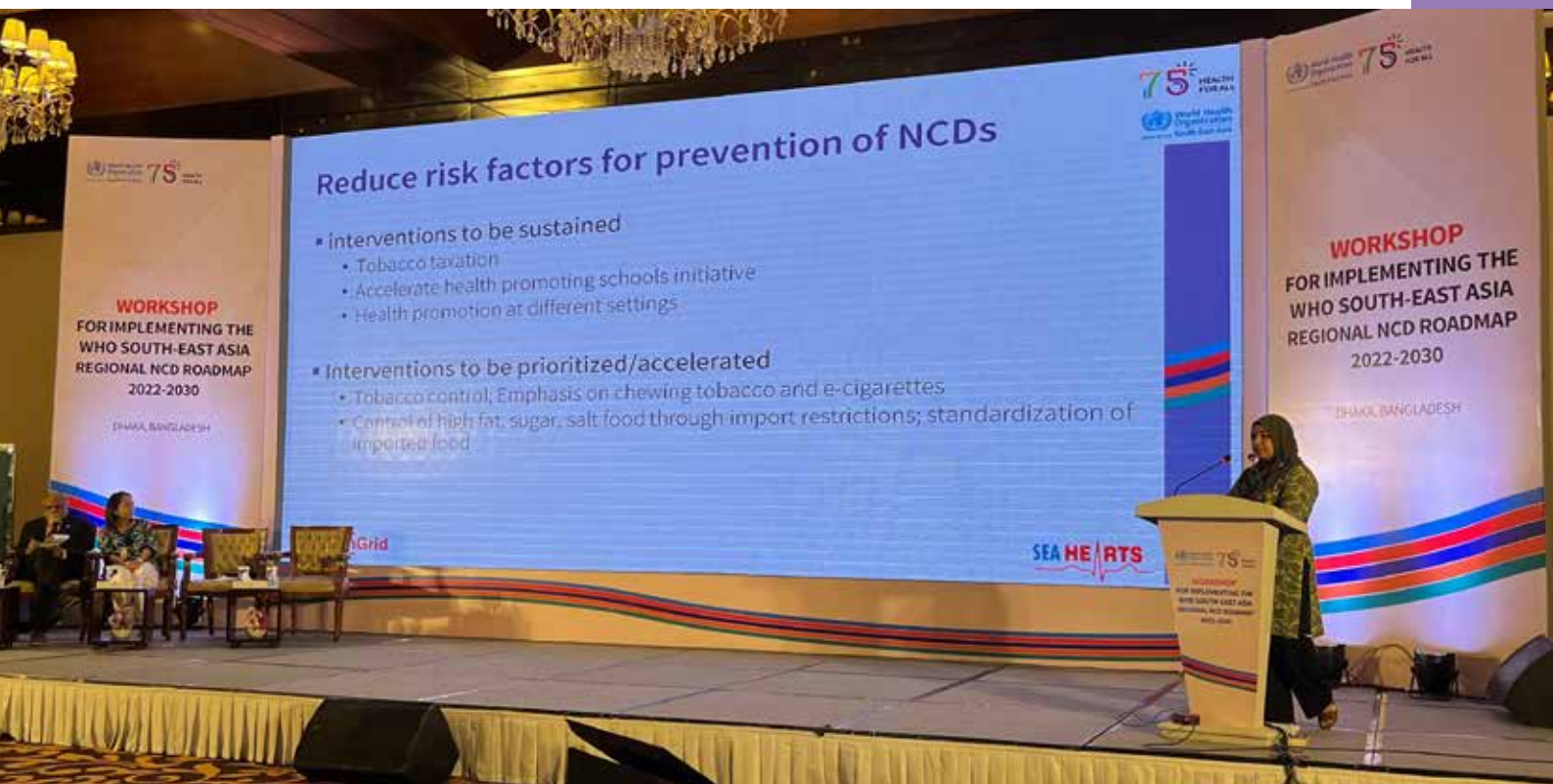
75

HEALTH
FOR ALL



SESSION 8

Country plans for implementing WHO South-East Asia Regional Roadmap 2022-2030 in the local context



In the concluding session, country team group worked to prepare country plan highlighting actions accordance to strategic direction provided in the Implementation Roadmap for accelerating prevention and control of NCDs in South-East Asia Region 2022-2030' and also reflected on draft Dhaka Call to Action and SEACanGrid that will contribute to reduction of premature mortality from NCDs. The session was moderated by Dr Cherian Varghese, WHO SEARO and Dr Olivia Corazon Nieveras, WCO Thailand.

The Dhaka Call to Action was presented, and country delegates deliberated in detail and provided valuable inputs on the Call to Action. The concluded 'Dhaka Call to Action -Accelerating the control of cardiovascular diseases in a quarter of the world's population' by participants is annexed. The of country plans are summarized in table 2.

Table 2 Country plans for implementing WHO South-East Asia Regional Roadmap 2022-2030 in the local context

Country name	Reducing NCD risk factors	Scaling up NCD management services	Strengthen NCD surveillance	Integrate NCD services in the response to emergencies	Requests to WHO for technical support
Bangladesh	<ul style="list-style-type: none"> • Sustaining the intervention for tobacco control, trans-fatty acids reduction and promoting health diet • Interventions to be prioritized and accelerated – salt reduction, implementing physical activity guidelines, Sugar sweetened beverages policy, and mental health promotion 	<ul style="list-style-type: none"> • Intervention to be sustained – NCD management model, screening of cervical cancer, expansion of hospital-based cancer registry • Interventions to be prioritized and accelerated – Three million patients will be on standardized treatment for HTN and/or DM, improve childhood cancer, stroke, ACS interventions 	<ul style="list-style-type: none"> • Establish systems to monitor NCD services in primary health care • Generate nationally relevant data on NCDs and NCD risk factors 	<ul style="list-style-type: none"> • Implementation of PEN-HEARTS package • National emergency response plan • Mental health services 	<ul style="list-style-type: none"> • Implementation of PEN-HEARTS • Nationwide survey on disease and risk factor • Development of guidelines, SOP, protocol, policy, strategy, costed action plan • Digitalization of the system • Logistic and equipment • Collaboration and coordination
Bhutan	<ul style="list-style-type: none"> • Prioritized / accelerated salt reduction strategy to be revitalized – Shake implementation • mPower for tobacco control • Trans fatty acid - replace 	<ul style="list-style-type: none"> • Prioritized community screening for NCDs • Protocol based management of Hypertension and diabetes • Cancer and stroke management registry • Cancer screening and prevention measures 	<ul style="list-style-type: none"> • National Health Survey 2023 • ePIS to be scaled up in accordance with the national plans • Explore innovative new systems – if sustainable 	<ul style="list-style-type: none"> • Incorporate services for chronic conditions into the National and local emergency/contingency/ response plans 	<ul style="list-style-type: none"> • Support the review of the technical guidelines DM and HTN protocols etc. • Support for capacity improvements - resources, training, human resources • Facilitate networking with professional organizations/networks to foster partnerships, learnings and exchange information

Country name	Reducing NCD risk factors	Scaling up NCD management services	Strengthen NCD surveillance	Integrate NCD services in the response to emergencies	Requests to WHO for technical support
India	<ul style="list-style-type: none"> • Implementation of national multisectoral action plan • Health and wellness activities at health wellness center including tobacco control, physical activity, promoting health diet • Illness to wellness approach • Smart City Mission and School education interventions 	<ul style="list-style-type: none"> • Population based screening expansion • Improving continuum of care • Leverage on various government flagship initiative • Activities to achieve target of putting 75 million people with hypertension or diabetes on protocol-based management – standard treatment protocol, durgs availability, use of digital solutions 	<ul style="list-style-type: none"> • Longitudinal monitoring through National NCD Portal • Monitoring of key performance NCD indicators • National NCD monitoring survey on regular basis and including of NCD indicators in National Family Health Survey • Cancer and stroke registries strengthening 	<ul style="list-style-type: none"> • Use of social media to raise awareness • Primary health care units linked to teleconsultation hub • Expansion of mobile medical units • Use of IT infrastructure for continuity of services 	<ul style="list-style-type: none"> • Research and evidence generation • Monitoring & Evaluation • NCDs estimates • Technical guidelines
Indonesia	<ul style="list-style-type: none"> • Multisectoral collaboration to promote TFA elimination through labelling • Scale up monitoring implementation of tobacco free zone through National TFZ dashboard • Accelerating HPV DNA testing • Explore Sugar Sweetened Beverages taxes 	<ul style="list-style-type: none"> • Scale up NCD screening: hypertension, diabetes, obesity, cervical cancer, breast cancer, COPD, stroke, cardiovascular • Improving NCD management guideline • Updating guidelines for cervical cancer management • Strengthening hospital referral network for Cancer-Heart-Stroke and Kidney diseases 	<ul style="list-style-type: none"> • Improving ASIK application for NCD management monitoring • Data triangulation with BPJS to bring sources of data together for a complete picture • NCD risk factor surveys • Develop Cancer Registry including childhoods Cancer 	<ul style="list-style-type: none"> • Inclusion of NCDs in the national disaster response plan • Climate resilient health facilities 	<ul style="list-style-type: none"> • Clinical guidelines for cervical cancer screening and management • Hypertension and Diabetes management • Updating PEN and HEARTS guidelines • NCD registry • Continue the Support for drafting policy/ legislation for unhealthy diets, tobacco and Physical Activities

Country name	Reducing NCD risk factors	Scaling up NCD management services	Strengthen NCD surveillance	Integrate NCD services in the response to emergencies	Requests to WHO for technical support
Maldives	<ul style="list-style-type: none"> Tobacco control; Emphasis on chewing tobacco and e-cigarettes Control of high fat, sugar, salt food through import restrictions; standardization of imported food Strengthen tobacco taxation 	<ul style="list-style-type: none"> Integration of NCD services into PHC Development of standard treatment guidelines, SOPs Strengthening high end clinical care – strong referral system Early identification, diagnosis and treatment of cancer Strengthening palliative care and rehabilitation services 	<ul style="list-style-type: none"> Expand PHC registry to all atolls Generate nationally relevant data on NCDs and NCD risk factors 	<ul style="list-style-type: none"> Integration of NCD services into emergency preparedness response plan 	<ul style="list-style-type: none"> Development of plans and policies on palliative care Development of plans for integration of cancer screening into PHC Development of standards for referral Set-up of National Quitline and m-cessation service Develop standard for imported food
Nepal	<ul style="list-style-type: none"> Tobacco control through MPOWER measures SAFER initiative for alcohol TFA legislation enforcement with REPLACE in collaboration with DFTQC, MoALD Salt reduction through SHAKE 	<ul style="list-style-type: none"> PEN package interventions in all 77 districts Hypertension and diabetes care cascade initiatives to strengthen PEN services (1.5 million cases to be put on protocol-based treatment by 2025) HPV vaccination for cervical cancer Stroke management care delivery and capacity building Medicine availability for common NCDs increased through free essential drug list through strong procurement Palliative care service delivery and capacity building 	<ul style="list-style-type: none"> PEN programme evaluation in 2023-2024 Academic partnership, engagement for supportive supervision and quality improvement and monitoring for NCD services Scale up population-based cancer registry NCD STEPS survey, 2024 and GATS in 2023 	<ul style="list-style-type: none"> Development of standard operating procedure for inclusion of NCD services in response to emergencies Create stockpile of NCD medicines and supplies for emergencies 	<ul style="list-style-type: none"> App-based digital support for hypertension and diabetes care cascade initiative in Nepal NCD STEPS Survey in 2024 Integration of cancer care in provincial hospitals Development of injury surveillance, response and capacity building Exposure visits and intercountry learning programmes on NCD innovations Global NCD programme management training for NCD programme directors and managers

Country name	Reducing NCD risk factors	Scaling up NCD management services	Strengthen NCD surveillance	Integrate NCD services in the response to emergencies	Requests to WHO for technical support
Sri Lanka	<ul style="list-style-type: none"> Scaling up specific populations-based policy measures based on MPOWER, REPLACE, SAFER and SHAKE recommendations Specific policy measures on smokeless tobacco based on MPOWER recommendations developed and implemented nationally. Vaccination against HPV and Hepatitis will be sustained as part of national EPI 	<ul style="list-style-type: none"> Hypertension and diabetes treatment and control expansion by implementing national treatment guidelines. Drug therapy and referral pathways expanded to control CV disease using Total risk approach and counseling for individual with high risk (>10%). Acute and long-term management of COPD at PHC level. Breast, oral, pediatric and Colorectal Cancer early diagnosis and management national childhood cancer strategy beyond 2025. Strengthening basic palliative care through shared care approach 	<ul style="list-style-type: none"> Expanding the implementation of digital app-based monitoring of hypertension and diabetes enrollment and treatment to identified geographical focus. Conducting harmonized Health Facility assessment for key NCD performance tracer indicators (Hypertension, diabetes, cervical & breast cancer). Conduct GSHS by 2025. Outcome assessments on specific WHO CHOICE interventions 	<ul style="list-style-type: none"> Cost-estimate assessments for key interventions to respond to NCDs related emergency care and management (acute NCDs). Development of national framework to include NCDs response and management as part of national emergency/disaster preparedness plans (service delivery PEN/ HEARTS, task shifting or task sharing to uninterrupted service provision). 	<ul style="list-style-type: none"> Translate global guidance in country specific actions to sustain and implement priorities. WHO TA and financial support to initiate prioritized projects on NCD management, including involvement of partners and donors. Development monitoring and health facility assessments for tracer interventions. Support risk factor surveillance, and specific risk factor impact assessments

Country name	Reducing NCD risk factors	Scaling up NCD management services	Strengthen NCD surveillance	Integrate NCD services in the response to emergencies	Requests to WHO for technical support
Thailand	<ul style="list-style-type: none"> • Strengthen and expand coverage SSB taxation • Establish salt tax • Raising awareness, the harmful of e-cigarette • Provincial salt consumption reduction • Implementation of WHO FCTC and SAFER 	<ul style="list-style-type: none"> • Quality assurance for PHC • DM remission and prevention services. • Community digital health station. • Proposal of fixed drug combination of anti-hypertensive drug into essential drug list. 	<ul style="list-style-type: none"> • Establish systems to monitor NCD services in primary health care • Annual electronic-based behavioral and health status household survey by village health volunteer • Generate nationally relevant data on NCDs and NCD risk factors 	<ul style="list-style-type: none"> • Strengthen tele-health and tele-med system for emergency 	<ul style="list-style-type: none"> • Experience sharing and cross-country collaboration.
Timor Leste	<ul style="list-style-type: none"> • Screening for all NCDs risk factors through tobacco cessation services center • Promoting of the prevention and control for NCDs risk factors through media • Advocacies for different levels of instructions organization on all risk factors • Demand generation for tobacco cessation and expanding tobacco cessation services in 9 municipalities • Promoting physical activities and tobacco free zone • Policy implementation on SSB and ratification for FCTC article illicit trade 	<ul style="list-style-type: none"> • Accelerated the implementation of PEN package established • Support the implementation of Cancer, Hemodialysis, Cardio units at National Hospital • Introduction of HPV vaccine • Support and ensure availability of NCDs essential medicine and equipment for primary health care services • Heart failure chronic treatment 	<ul style="list-style-type: none"> • Reviewing the NCDs monitoring system through DHS-2 • Adapt digitalization of NCDs specific surveillance system • Conduct 2nd round National Survey on NCDs and NCD risk factors among adults and NCD services in health facilities in Timor-Leste 2023 	<ul style="list-style-type: none"> • Develop National Emergency Management for NCDs and Mental Health Psychosocial Support in Emergency Situation • Integrating NCDs and MHPSS into the Emergency Response Cluster 	<ul style="list-style-type: none"> • Technical and Financial support for accelerating the implementation of key priorities planned



Annexures



Address by the Regional Director

Globally, 41 million people die from NCD each year, equivalent to 74% of all deaths. In the South-East Asia Region, NCDs cause an estimated 9 million deaths annually, which means that 69% of all deaths in the Region are due to NCDs. Importantly, almost half of NCD mortality is in the age group of less than 70 years. Today, an estimated 250 million people in the Region have raised blood pressure. Nearly 98 million are diabetic. The trend of the cancer burden is rising and expected to rise further. In our region, an estimated 2.3 million people developed cancer in 2020, and 1.4 million died of the disease.

The probability of dying from CVDs, cancers, diabetes, and chronic respiratory diseases between the ages of 30 and 70 years is almost two percentage points lower than a decade ago, at 21.6%. Between 2000 and 2015. The Region reduced the prevalence of tobacco use from 46.6% to 31.2%. The COVID-19 pandemic affected people with NCDs, disproportionately.

Even with these positive outputs, at the current rate of progress, the Region will fail to achieve the 2030 NCD-related Sustainable Development Goal target of reducing premature mortality from NCDs by 2030.

This is why the Member States unanimously adopted the Regional Roadmap for accelerating NCD prevention and control and agreed to report the progress every two years till 2030.

The NCD roadmap aims to accelerate progress toward the 2025 and 2030 targets, with a focus on several high-impact and cost-effective 'best buy' interventions, in line with our Flagship Priority.

It includes three strategic directions, applicable to all Member States, as well as an interactive tool designed to help countries to identify and fast-track context-specific actions. It aims to increase the collection and analysis of high-quality data and thereby strengthen impact and accountability.

We are at a history-defining juncture. We have guidance on an expanded set of 'Best Buys' in the form of a menu of policy options and cost-effective interventions for the prevention and control of NCDs. A range of new technologies and digital solutions are available to empower and engage people who are living with or at risk of NCDs. We have new tools to help in prioritization, and an increased focus on programmatic and geographical convergence, which will maximize both efficiency and impact.

Public health programs work best when they focus on specific, measurable, ambitious, and achievable targets. I congratulate all the Member States for supporting the Regional initiative of South East Asia HEARTS. through the Dhaka Call to Action at this workshop. The initiative implemented through adapting the WHO HEARTS package taken up has identified the following four targets for the control of cardiovascular diseases by 2025:

First, a hundred million people with hypertension and or diabetes are placed on protocol-based management;

Second, one billion people are covered by at least three WHO MPOWER measures for tobacco control;

Third, one billion people are covered with the WHO SHAKE technical package measures for reducing salt intake

And fourth, two billion people are protected from the harmful effects of trans fatty acids through WHO REPLACE package measures.

Together, the achievement of these targets will significantly increase our prospect of attaining the NCD-related SDGs and creating a healthier, more equitable, and sustainable South-East Asia Region for all.

I am also delighted to be joining hands with the member states in the fight against cancer in the region. In this regard, I am pleased to inform you about the formation of the South-East Asia Cancer Grid Network (SEACanGridNet). The grid network is expected to bring key service provider institutions on a common platform thus facilitating sharing of knowledge and experiences on evidence-based practices and fostering collaborations in capacity building and patient care.

Thank you.

Programme

Day 1 Monday 12 June 2023

Time		Opening session
09.00-09.30		
09.00-09.10	Message from the Regional Director, WHO Regional Office for South- East Asia	Dr Bardan Jung Rana, WHO Representative to Bangladesh
09.10-09.20	Address by Special Guest	Mr Saidur Rahman Additional Secretary, Health Services Division, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh
09.20-09.30	Address by Special Guest	Professor Dr Abul Bashar Mohammad Khurshid Alam, Director General, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh
09.30-09.40	Address by Chief Guest	Dr Md. Anwar Hossain Howlader Secretary, Health Services Division, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh
09.40-09.50	Scope and objective of the workshop	Dr Cherian Varghese, Director (Healthier Population and NCDs) a.i. Regional Office for WHO South- East Asia
09.50-10.15		
Group photo and healthy break		
	Session	Speakers /Facilitators
10.15-10.30	Introduction of participants	
	Session 1. Accelerating the prevention and control of NCDs in WHO South-East Asia 2022-2030 Moderators: Dr Taskeen Khan, Dr Angela De Silva, WHO	
10.30-11.45	Success stories from countries: Presentation from countries – 5 minutes & follow up question 2 minutes	Country teams
11.45-12.00	NCD risk factor control- what is new?	Dr Angela De Silva, WHO
12.00-12.15	NCD management - what is new?	Dr Pradeep Joshi, WHO
12.15-12.30	Discussion	

12.30-13.30 <i>Food for thought – lunch break</i>		
	Session 2. WHO SEAR NCD Impact Simulation Tool for prioritization of NCD interventions	
13.30-13.50	Overview and demonstration on NCD impact simulation tool features	Dr David Watkins, University of Washington
13.50-15.15	Group work to identify priorities in the national context & their impact using the NCD impact simulation tool	Facilitators WHO team
15.15-15.40 <i>Healthy break</i>		
15.40-17.00	Presentation by countries: to share NCD interventions to be accelerated in the national context based on familiarization of NCD Impact Simulation Tool (5 mins each followed by discussion)	Country teams

Day 2 Tuesday 13 June 2023

Time	Session	Speakers /Facilitators
09.00-09.05	Recap-day 1	Dr Nalika Gunawardena, WHO
	Session 3. Addressing NCD in as an integral part of the response to emergencies Moderators: Nepal and India	
09.05- 09.45	Towards a model service delivery for NCD prevention and management in humanitarian settings: Experience from Cox's Bazar, Bangladesh	Mr Khandaker Mohammad Ali, Joint Secretary, Cox's Bazar
09.45-09.55	Findings of the global landscape and experience from other regions on NCDs in emergencies	Dr Kiran Jobanputra, WHO
09.55-10.30	Discussion	Facilitators Dr Sadhana Bhagwat, WHO, Kiran, WHO
10.30-10.45 <i>Healthy break</i>		
	Session 4. Reducing gaps in cancer care in WHO South -East Asia Region Moderators: Sri Lanka and Timor-Leste	
10.45-11.00	Experience of National Cancer Grid, India	Dr Girish Chinnaswamy, Tata Memorial Hospital, India
11.00-11.20	Improving cancer care services in countries	Dr Bishnu Rath Giri, WHO
11.20-12.30	Discussion	Facilitators

12.30-13.30 <i>Food for thought – lunch break</i>		
	Session 5. Systems for monitoring NCD services in primary health care Moderators: Maldives and Indonesia	
13.30-14.00	Facility based monitoring indicators and application for hypertension and diabetes	Taskeen, Pradeep,WHO
14.00-14.20	Digital solutions and use of technology to support monitoring of NCD services at primary health care	Mr Eshan Nanda, Dell Technologies
14.20- 14.40	Outcome- based monitoring and evaluation approach to prevent and manage hypertension and diabetes	Dr Sohel Reza Choudhury, National Heart Foundation, Bangladesh
14.40-14.50	Discussion	
14.50-15.15 <i>Healthy break</i>		
15.15-17.00	Reflection by countries on monitoring systems for NCDs, plan to initiate/expand facility-based monitoring of hypertension and diabetes (poster presentation)	Country teams
17.00	Announcements on the arrangements for the field visit	Pradeep

Day 3 (14 June 2023)

Time	Session	Resource persons/moderators
	Session 6. Field Visit to observe integration of NCD services in primary health care settings	
08.45	Leave Hotel	
09.30	Arrival to health facilities	
09.55-10.30	Group A – Visit to primary health care settings • Community center and • Saturia Upazila Health Complex (UHC), Manikganj	Dr Mahfuzul Syed Huq, WHO
	Group B- Visit to primary health care settings • Community center and • Singair Upazila Health Complex (UHC), Manikganj	Dr Dorin Farzana Akter, WHO
12.30	Both groups convene at Centre for the Rehabilitation of the Paralyzed (CRP), Chapain, Savar	

12.30-13.30 <i>Lunch break</i>		
13.30-15.00	Experience sharing and reflections on the field visit	Country teams
15.00	Briefing and tour to CRP	
15.30 <i>Travel back to hotel</i>		

Day 4 (15 June 2023)

Time	Session	Speakers/Facilitators
09.00-09.05	Recap-day 2 and 3	Bishnu, WHO
	Session 7. Surveillance for NCDs Moderators: Thailand and Bhutan	
09.05-09.35	Surveillance of NCDs and risk factors in South- East Asia Region	Nalika, WHO Dr Helder Juvinal Neto da Silva, Timor-Leste
09.35-10.00	Stroke care services and surveillance	Dr Jeyaraj Durai Pandian, World Stroke Organization (video presentation)
10.00- 10.15	Discussion	
10.15-10.45 <i>Healthy break</i>		
10.45-12.30	Country group work on next steps to <ul style="list-style-type: none"> • Scale up CVDs prevention and control through SEAHEARTS implementation • Reduce cancer care gaps • Scale up surveillance and timely data 	Facilitators –WHO team
12.30-13.15 <i>Food for thought – lunch break</i>		
	Session 8. Country plans for implementing the WHO South-East Asia Regional Roadmap, 2022-2030 in the local context Moderators: Cherian and Angela	
13.15-15.25	Presentation and discussion of country plans	Country teams
15.25-15.30	Next steps and closing	Nalika

List of participants

Workshop for Implementing the WHO South-East Asia Regional NCD Roadmap 2022-2030

Dhaka, Bangladesh
12-15 June 2023

Date: 12 June 2023

Ministries of Health officials

Bangladesh

1. **Prof Dr Mohammad Robed Amin**
Line Director
Noncommunicable Diseases Control
Directorate General of Health Services
Ministry of Health and Family Welfare
Government of the People's Republic of
Bangladesh
Dhaka, Bangladesh
robedamin@yahoo.com
2. **Ms. Anjuman Ara**
Joint Secretary
Health Services Division
Ministry of Health and Family Welfare
Government of the People's Republic of
Bangladesh
Dhaka, Bangladesh
anjuman2174@gmail.com
3. **Mr Md Sadekul Islam**
Deputy Secretary
Health Services Division
Ministry of Health and Family Welfare
Government of the People's Republic of
Bangladesh
Dhaka, Bangladesh
samonti2009.24@gmail.com
4. **Dr Rafique Us Saleheen**
Program Manager -1
Noncommunicable Diseases Control
Directorate General of Health Services
Ministry of Health and Family Welfare
Government of the People's Republic of
Bangladesh
Dhaka, Bangladesh
rusaleheen@gmail.com
5. **Dr Johirul Islam**
Associate Professor
National Institute of Cancer Research and
Hospital
Ministry of Health and Family Welfare
Government of the People's Republic of
Bangladesh
Dhaka, Bangladesh
drjohir@gmail.com
6. **Mr Khandaker Mohammad Ali**
Joint Secretary (PI)
Health Services Division and DPM
Health and Gender Support Project
Cox's Bazar District
Bangladesh
health2@hsd.gov.bd

7. Dr Md Mahbudur Rahman

Civil Surgeon (Cox's Bazar)
Cox's Bazar Sadar
Cox's Bazar
Bangladesh
dr.mahbub17@gmail.com

8. Dr Ranjan Barua Rajan

Upazila Health and Family Planning Officer
Ukhia
Cox's Bazar
Bangladesh
dr.ranjan1983@gmail.com

Bhutan

9. Dr Chhabi Lal Adhikari

Specialist
Jigme Dorji Wangchuk National Referral
Hospital
Ministry of Health
Royal Government of Bhutan
Thimphu, Bhutan
dr.c.l.adhikari@gmail.com

10. Mr Laigden Dzed

Chief Program Officer
Noncommunicable Diseases Division
Department of Public Health
Royal Government of Bhutan
Thimphu, Bhutan
ldzed@health.gov.bt

11. Dr Lham Dorji

Dy Chief Nutritionist
Dampu Hospital
Tsirang
Royal Government of Bhutan
Thimphu, Bhutan
lhamdorji44@gmail.com

India

12. Ms Sarita Nair

Deputy Secretary (NCD II)
Ministry of Health and Family Welfare
New Delhi
India
sarita.nair@gov.in

13. Dr Sunny Swarnkar

Deputy Assistant Director General
Directorate General of Health Services
Ministry of Health and Family Welfare
New Delhi
India
sswarankar@naco.gov.in

Indonesia

14. Dr Theresia Sandra Diah Ratih

Chief
Cancer and Blood Disorders Disease
Directorate of Prevention and Control of
Noncommunicable Diseases
Republic of Indonesia
Jakarta, Indonesia

15. Dr Tiersa Vera Junia

Chief
Brain-related disorders
Directorate of Prevention and Control of
Noncommunicable Diseases
Republic of Indonesia
Jakarta, Indonesia
tiersa.vera@gmail.com

16. Dr Burhanuddin

NCDs Coordinator
West Nusa Tenggara Province
Republic of Indonesia
Jakarta, Indonesia
bunk_zazak66@yahoo.com

17. Dr Yutika Adnindya

Policy Analyst
Center for Health System and Strategy
Republic of Indonesia
Jakarta, Indonesia
yutika.adnindya@kemkes.go.id

18. Dr Luh Komang Mela Dewi

Consultant for Cancer
Center for Health System and Strategy
Republic of Indonesia
Jakarta, Indonesia
lkmeladewi@gmail.com

Maldives

19. Mr Hassan Mohamed

Deputy Director
Health Protection Agency
Ministry of Health
Republic of Maldives
hassan@health.gov.mv

20. Mr Mukhthaar Yoosuf

Senior Community Health Officer
Ungoofaaruu Regional Hospital
Ministry of Health
Republic of Maldives
mukhthaar1966@gmail.com

Nepal

21. Dr Phanindra Prasad Baral

Chief
NCD Mental Health Section
Epidemiology and Disease Control Division
Ministry of Health and Population
Nepal
baraldrphanindra@gmail.com

22. Mr Ramji Ghimire

Public Health Inspector
NCD and Mental Health Section
Epidemiology and Disease Control
Division
Department of Health Services
Kathmandu, Nepal

Sri Lanka

23. Dr S Sridharan

Deputy Director General (Planning)
Ministry of Health
Government of the Socialist Republic of Sri Lanka
Colombo, Sri Lanka
drsri94115@gmail.com

24. Dr Samiddhi Samarakoon

Director
Noncommunicable Diseases
Ministry of Health
Government of the Socialist Republic of Sri Lanka
Colombo, Sri Lanka
samiddhisamarakoon@yahoo.com

25. Dr Suraj Perera

Consultant Community Physician
National Cancer Control Programme
Government of the Socialist Republic of Sri Lanka
Colombo, Sri Lanka
pererasn@yahoo.com

Thailand

26. Dr Krisada Hanbunjerd

Director
Division of Non-communicable diseases
Ministry of Public Health
Royal Thai Government
Thailand
iamkrisada@gmail.com

27. Dr Auttakit Karnjanapiboonwong

Medical Officer
Expert level
Division of Noncommunicable Diseases
Department of Disease Control
Ministry of Public Health
Royal Thai Government
Thailand
auttakit@yahoo.com

28. Ms Tarinee Pangjunun

Public Health Technical Officer
Professional Level
Division of Noncommunicable Diseases
Department of Disease Control
Ministry of Public Health
Royal Thai Government
Thailand
sendtokob@gmail.com

29. Dr Suleeporn Sangrajrang

Deputy Director
National Cancer Institute
Department of Medical Services
Ministry of Public Health
Royal Thai Government
Thailand
sulee@health.moph.go.th;
suleesa@yahoo.com;
foreign.dms2562@gmail.com

Timor-Leste

30. Dr Helder J N da Silva

Chronic Disease Control Focal Point
NCD Department
Diseases Control Directorate
Ministry of Health
Democratic Republic of Timor-Leste
helderjuvinal@gmail.com

31. Dr Adelia Maria Moniz Barretor

Head
Department of Noncommunicable Disease
Ministry of Health
Democratic Republic of Timor-Leste
barreto.adelia22@gmail.com

32. Dr Aristides da Costa Carvalho

Focal Point
Noncommunicable Disease
Becora Community Health Center
Democratic Republic of Timor-Leste
dacopaz7@gmail.com

Experts

33. Dr David Watkins

Associate Professor
Department of Global Health
University of Washington
Seattle, USA
davidaw@uw.edu

34. Dr Sohel Reza Choudhary

Professor and Head
Department of Epidemiology and Research
National Heart Foundation Hospital and
Research Centre
Bangladesh
sohel_r_choudhury@hotmail.com

35. Dr Girish Chinnaswamy

Professor
Tata Memorial Hospital
Mumbai
India
girish.c.tmh@gmail.com

36. Mr Eshan Nanda

Chief Architect
Social Innovation
Dell Technologies
India
eshan.nanda@dell.com

37. Dr Jeyaraj Durai Pandian

Professor of Neurology
President Elect
World Stroke Organization
India
jeyarajpandian@hotmail.com

Observers

38. Dr Bolanle Banigbe

Deputy Director – Hypertension
Resolve to Save Lives
New York
United States of America
bbanigbe@resolvetosavelives.org

39. Dr Md Shamim Hayder Talukder

Chairperson
SEAR NCD Alliance
Bangladesh
ceo@eminence-bd.org

WHO Headquarters

40. Dr Taskeen Khan

Medical Officer NCD
khant@who.int

41. Dr Roberta Ortiz Sequeira

Medical Officer NCD
ortizr@who.int

42. Dr Kiran Jobanputra

Consultant NCD
jobanputrak@who.int

WHO Country offices

43. Dr Sadhana Bhagwat

Medical Officer, NCD
Bangladesh
bhagwats@who.int

- 44. Dr Syed Mahfuzul Huq**
National Professional Officer, NCD
Bangladesh
huqs@who.int
- 45. Dr Farzana Akter Dorin**
National Professional Officer, NCD
Bangladesh
dorinf@who.int
- 46. Md Reazwanul Haque Khan**
Executive Assistant
Bangladesh
khanre@who.int
- 47. Dr Jorge Martinez**
Head of Suboffice
Cox's Bazar
Bangladesh
- 48. Dr Aarti Shrikrishana Singh**
Public Health Response Officer
Cox's Bazar
Bangladesh
- 49. Dr Raisul Islam**
NCD Officer
Cox's Bazar
Bangladesh
- 50. Mr Pema Lethro**
National Professional Officer, NCD
Bhutan
lethrop@who.int
- 51. Dr Yutaro Setoya**
Team Lead, NCD and Comorbidities
India
setoyay@who.int
- 52. Dr Abhishek Kunwar**
National Professional Officer
Noncommunicable Diseases
India
kunwara@who.int
- 53. Dr Lubna Bhatti**
Team Lead
NCDs and Healthier Population
WCO Indonesia
bhattil@who.int
- 54. Dr Fransiska Mardiananingsih**
National Professional Officer
SDH and Health Promotion
WCO Indonesia
mardiananingsihf@who.int
- 55. Ms Fathimath Hudha**
National Professional Officer
Planning and Programme Management
Maldives
hudhaf@who.int
- 56. Dr Dinesh Jeyakumaran**
Technical Officer
Diet and Nutrition
Myanmar
jeyakumarand@who.int
- 57. Dr Gampo Dorji**
Team Lead, NCD
Nepal
dorjid@who.int
- 58. Dr Lonim Dixit**
National Professional Officer
Nepal
dixitl@who.int
- 59. Dr Farrukh Qureshi**
Medical Officer, NCD
Sri Lanka
qureshif@who.int
- 60. Dr Olivia Corazon Nieveras**
Medical Officer, NCD
Thailand
nieveraso@who.int
- 61. Mr Leoneto Pinto**
National Professional Officer, NCD
Timor-Leste
pintol@who.int
- 62. Dr Cherian Varghese**
Director a.i.
Healthier Populations and Noncommunicable Diseases
varghesec@who.int

WHO SEARO

63. Dr Angela De Silva

Regional Adviser -
Healthier Populations and Noncommunicable
Diseases
desilvap@who.int

64. Dr Nalika Gunawardena

Technical Officer
Healthier Populations and Noncommunicable
Diseases
gunawardenan@who.int

65. Dr Bishnu Rath Giri

Technical Officer - Cancer
Healthier Populations and Noncommunicable
Diseases
girib@who.int

66. Dr Pradeep Joshi

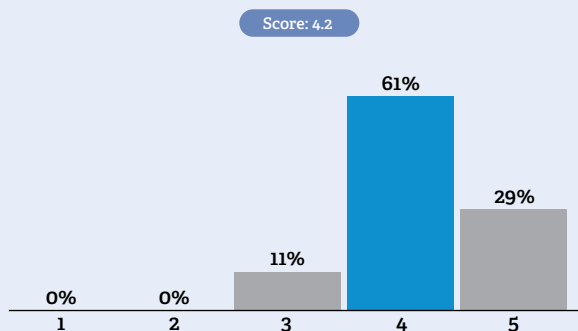
Technical Officer
Healthier Populations and Noncommunicable
Diseases
joshi@who.int

67. Ms Sheenu Arora

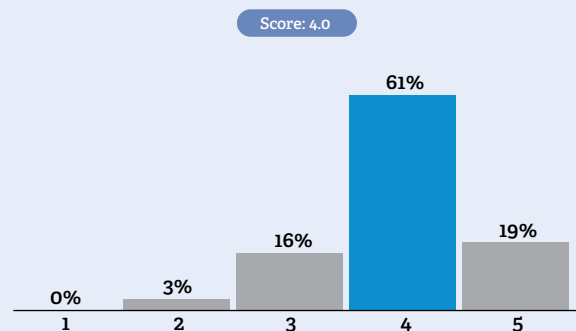
Executive Assistant
Healthier Populations and Noncommunicable
Diseases
WHO SEARO
arorash@who.int

Participant's Feedback through Slido

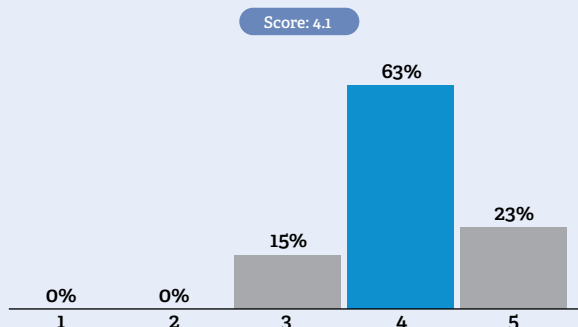
1. To what extent the objectives of the meeting were accomplished? 0 2 8



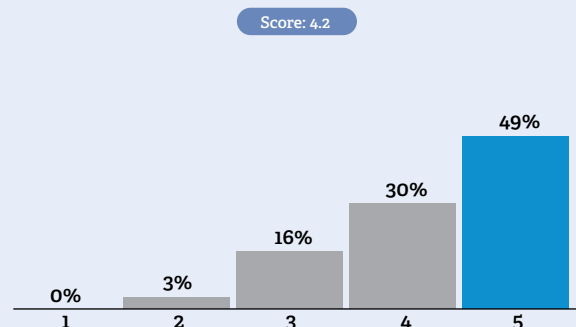
2. The extent to which the agenda items were relevant to achieve objectives 0 3 1



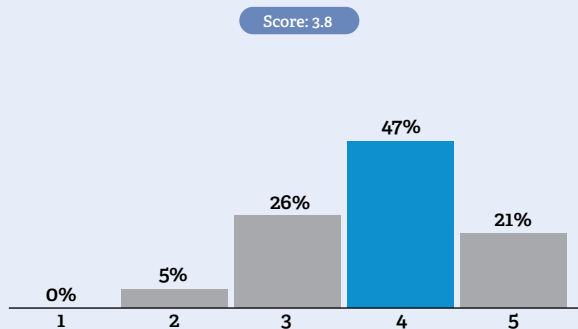
3. The presentations and discussions were effective in getting to know the WHO tools and technical guidance 0 4 0



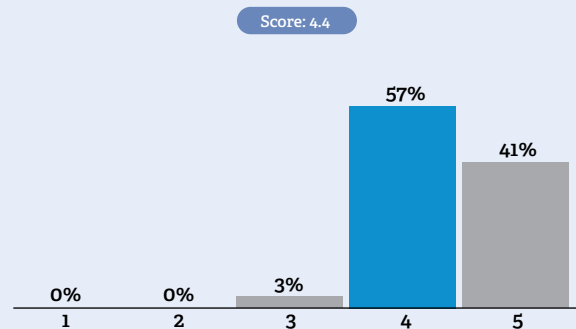
4. Field trip: Was it relevant to achieve the objectives of the meeting? 0 3 7



5. The panel discussions were effective in clarifying the areas of coordinated support available for countries. 0 3 8



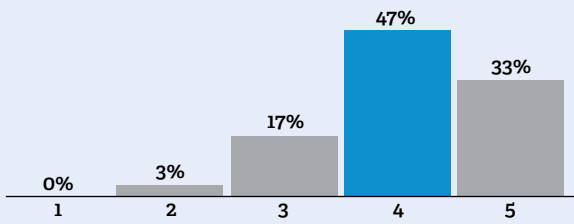
6. The working papers presented were substantive to the needs of the meeting. 0 3 7



7. Adequate opportunities were given to exchange information with other participants

0 3 6

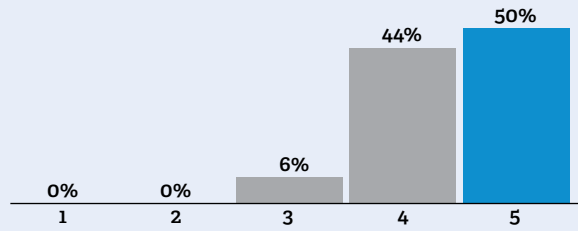
Score: 4.1



8. The meeting was effective in getting to know the NCD team in the countries/ region/ headquarters

0 3 6

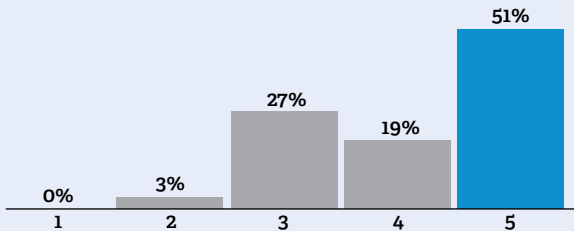
Score: 4.4



9. Are you in a position to integrate the outcome of this meeting to the national work plan?

0 3 7

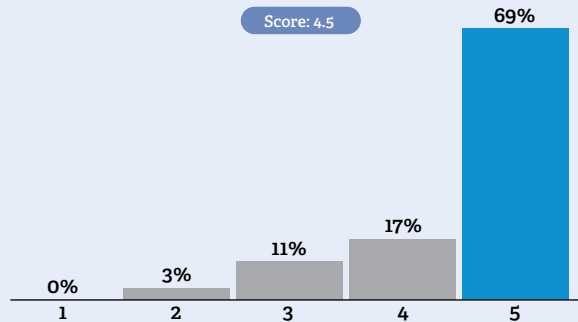
Score: 4.2



Meeting venue

0 3 6

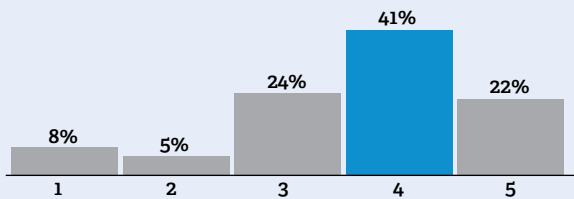
Score: 4.5



Conduct a 'healthy meeting'

0 3 7

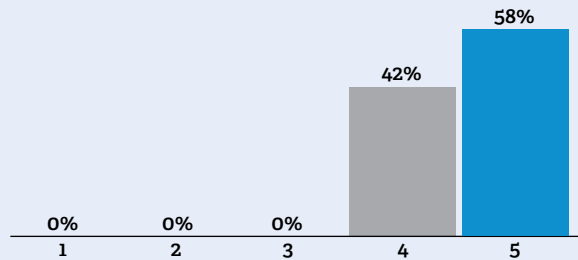
Score: 3.6



Overall organization during the meeting

0 3 6

Score: 4.6



WHO South-East Asia Region Resources for NCD prevention, management and surveillance

- WHO South-East Asia Regional NCD Roadmap: <https://apps.searo.who.int/whoroad/homev2>
 - South-East Asia Region NCD impact simulation tool: <https://apps.searo.who.int/whoroad/south-east-asia-region-ncd-impact-simulation-tool>
 - South-East Asia Region NCD toolkit- <https://apps.searo.who.int/whoroad/south-east-asia-region-ncd-toolkit>
 - NCD MSAP Tool: <https://apps.who.int/ncd-multisectoral-plantool/home.html>
 - WHO PEN: <https://apps.who.int/iris/handle/10665/334186> (Available as a mobile app also)
- WHO PEN app: <https://extranet.who.int/whoncdspenwp/>
 Google Play Store: <https://play.google.com/store/apps/details?id=org.who.WHOPEN>
 App Store: <https://apps.apple.com/in/app/whopen/id1566338877>
- HEARTS technical package: <https://apps.who.int/iris/handle/10665/333221>
- HEARTS D: <https://www.who.int/publications/i/item/who-ucn-ncd-20.1>
- SEAHEARTS: <https://www.who.int/southeastasia/activities/seahearts-for-accelerating-cvd-control>
- SEARO NCD dashboard: <https://whosearo.viewzenlabs.in/home>
- Noncommunicable Diseases Data Portal: <https://ncdportal.org/>
- The Global Health Observatory: <https://www.who.int/data/gho>
- World Health Statistics: <https://www.who.int/data/stories/world-health-statistics-2023-a-visual-summary/>

Dhaka Call to Action

Accelerating the control of cardiovascular diseases in a quarter of the world's population

15 June 2023
Dhaka, Bangladesh

We, the participants at the Workshop for implementing the WHO South-East Asia NCD Roadmap 2022–2030, held in Dhaka, Bangladesh, on 12–15 June 2023:

Recognize that the WHO South-East Asia Region's Flagship Priority Programme of "Prevention and management of noncommunicable diseases through multisectoral policies and plans, with a focus on 'best buys'" has made tangible progress in the prevention and control of major noncommunicable diseases (including cardiovascular disease, cancer, diabetes and chronic respiratory diseases) and their risk factors (tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity), resulting in the probability of premature death from NCDs declining from 23.4% in 2010 to 21.6% in 2019;

Understand that the current speed of decline is not adequate to reach the NCD target of 2025 and Target 3.4 of the Sustainable Development Goals which is to "by 2030, reduce by one third premature mortality from NCDs through prevention and treatment, and promote mental health and well-being", and recognize the guidance adopted through resolution SEA/RC75/R2 on "Implementation Roadmap for accelerating the prevention and control of noncommunicable diseases in South-East Asia 2022–2030" adopted at the Seventy-fifth Session of the WHO Regional Committee for South-East Asia in Paro, Bhutan, in September 2022;

Realize that cardiovascular diseases (CVD) are the major cause of premature mortality in the Region and that accelerated efforts for their prevention and control are vital to reducing premature mortality from NCDs at a faster pace;

Reaffirm the commitments contained in the Colombo Declaration on "Strengthening health systems to accelerate delivery of noncommunicable diseases services at the primary health care level", endorsed at the Sixty-ninth session of the WHO Regional Committee for South-East Asia in Colombo, Sri Lanka, in September 2016;

Acknowledge the high burden of hypertension and diabetes in the Region and the suboptimum coverage and control of these two conditions at the population level;

Appreciate the progress made in reducing tobacco use and population salt intake, eliminating artificial trans-fatty acids and improving the management of hypertension and diabetes mellitus in primary health care;

Acknowledge that the SEAHEARTS initiative that brings together WHO technical packages of PEN, HEARTS, SHAKE, REPLACE and MPOWER, and implements them in the national context, can greatly add to the momentum for CVD control in the Region;

Agree to sustain the efforts to reduce the cardiovascular disease risks from the harmful use of alcohol, physical inactivity and air pollution and underlying social determinants using a range of policy options, public health policies and programmes, measures provided in SAFER, ACTIVE, CHEST and other cost-effective interventions provided in the WHO technical packages;

Recognize the targets set in the 2030 Agenda for Sustainable Development and the updated NCD targets for 2025, and the time-bound commitment to strengthen and reorient health systems to address NCD through people-centred primary health care by 2025; and

COMMIT TO ACCELERATE the progress towards the following targets in support of the SDG target on NCDs:

- 1) 100 million people with hypertension and/or diabetes are placed on protocol-based management,
- 2) One billion people are covered by at least three WHO MPOWER measures for tobacco control,

- 3) One billion people are covered with at least one of the WHO SHAKE package measures for reducing salt intake, and
- 4) Two billion people are protected from the harmful effects of trans-fatty acids through best practices or complementary policy measures of WHO REPLACE; and

CALL UPON national governments, health service providers, non-State Actors and developmental partners to undertake the following actions as appropriate to their constituency to reach the above targets and thereby accelerate the progress towards SDG 3.4:

1. Advocate for national actions through

- Policies that promote healthy diets, focusing on reducing dietary sodium intake, eliminating industrial trans-fatty acids, and reducing tobacco use, through adaptation of WHO technical packages such as SHAKE, REPLACE and MPOWER, and accelerate their implementation,
- Programmes and service delivery models for scaling up detection, diagnosis, management and monitoring of hypertension and diabetes through adaptation of the WHO HEARTS package,
- Allocation of adequate human, financial and technical resources to achieve the targets, and
- Enhanced community engagement and social participation for cardiovascular disease prevention and control interventions.

2. Strengthen primary health care for scaling up coverage of hypertension and diabetes services by measures to

- Adapt and implement the WHO HEARTS package in the national context and develop a service delivery model, including guidelines and standard operating procedures with an emphasis on primary health care,
- Develop national and subnational plans to rapidly scale up the coverage and quality of hypertension and diabetes management to reach the planned coverage,
- Promote integrated screening for hypertension and diabetes to be implemented at all clinical encounters and through outreach efforts,
- Ensure that screen positives are followed up for diagnosis along with a mechanism to trace the defaulters,
- Mandate and facilitate protocol-based management for hypertension and diabetes at the primary care level,
- Establish clinical care pathways for hypertension and diabetes within primary care with referral linkages to higher levels of care for specialized services,
- Ensure adequate numbers of competent staff and team-based care,
- Procure and enforce the use of quality assured devices for the measurement of blood pressure and blood sugar,
- Ensure continuous supply of medicines as per the protocols,
- Guide patients to follow healthy lifestyles, with regular blood pressure and blood sugar checks, and adopt context-specific approaches to ensure compliance to treatment,
- Adopt an information system that allows longitudinal monitoring and follow-up of the individuals and to measure a minimum set of indicators using digital solutions,
- Develop a supportive supervision system with adequate personnel for continuous quality improvement,
- Emphasize the importance of extending treatment for hypertension and diabetes to people living

in fragile, conflict-affected and vulnerable (FCV) settings, especially since access to treatment for complications is often difficult in these settings,

- Develop linkages with antenatal care, TB control programmes and other relevant areas of work to ensure that people with hypertension and diabetes are detected and managed, and
- Engage the private sector, professional associations, academic institutions and civil society organizations to scale up strategies and activities.

3. Scale up implementation of WHO MPOWER measures to reduce tobacco use to

- Monitor tobacco use and prevention policies. Make use of the data to advocate for strengthening of tobacco control laws and policies to reduce tobacco use among adults and youth,
- Protect people from tobacco smoke by eliminating exposure to second-hand tobacco smoke in all indoor workplaces, public places and public transport,
- Offer help to quit tobacco use through provision of cost-covered effective population-wide support (including brief advice, national toll-free quitline services and mCessation) and use of the WHO QuitTobacco app for tobacco cessation to all tobacco users,
- Warn about the dangers of tobacco by implementing large graphic health warnings on all tobacco packages, or implementing plain/standardized packaging,
- Implement effective mass media campaigns to educate the public about the harms of tobacco use and second-hand smoke, and encourage behavioural change for quitting,
- Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship, and
- Progressively, increase excise taxes and prices of tobacco products.

4. Promote healthy diet

a) Scale up context-specific actions to implement the SHAKE technical package to reduce population salt intake by executing the following

- Measure and monitor population salt consumption patterns and sodium content of food, and evaluate the impact of salt reduction programmes,
- Implement integrated education and communication strategies to raise awareness about the health risks and dietary sources of salt and ultimately change behaviour,
- Set target levels for the amount of salt in foods and meals and implement strategies to promote reformulation based on regional reformulation targets,
- Adopt interpretive front-of-pack nutrition labelling systems as part of comprehensive nutrition labelling policies for facilitating consumers' understanding and choice of food for healthy diets,
- Implement strategies to combat the marketing of foods and beverages high in salt, sugar and fats to children, and
- Implement multicomponent strategies to promote healthy diets including salt reduction in settings such as schools, workplaces and hospitals.

b) Scale up implementation of REPLACE technical package to eliminate industrially produced trans-fatty acids from the food supply through the following measures

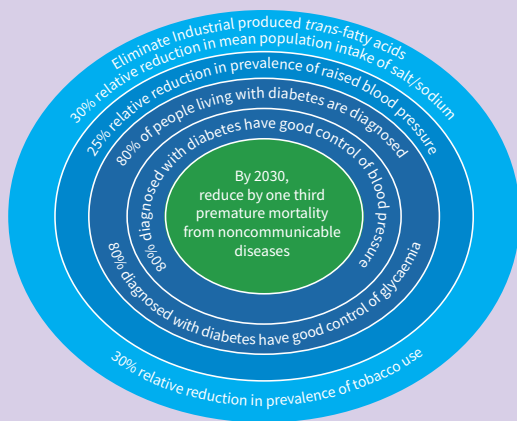
- Review dietary sources of industrially produced trans-fatty acids and the landscape for required policy change. Introduce the REPLACE action package, based on initial scoping activities, and draft a country roadmap for trans-fatty acids elimination,
- Promote the replacement of industrially produced trans-fatty acids with healthier fats and oils,

- Legislate or enact regulatory actions to eliminate industrially produced trans-fatty acids. Develop regulations suitable to the country context or update the existing legal framework to match the approach recommended by the World Health Organization,
- Assess and monitor trans-fatty acids content in the food supply and changes in trans-fatty acids consumption in the population,
- Create awareness of the negative health impact of trans-fatty acids among policy-makers, producers, suppliers and the public,
- Enforce compliance with policies and regulations and map existing and create new enforcement powers and mechanisms, public communications, penalties, funding and timelines.

We, **the participants at the Workshop for implementing the WHO South-East Asia NCD Roadmap 2022–2030, held in Dhaka, Bangladesh, on 12–15 June 2023**, request the Regional Director of the WHO South-East Asia Region to continue to provide leadership and technical support to countries along with partners to collectively achieve the targets set in this Dhaka Call to Action.

SEA HEARTS brochure

SEAHEARTS contribution to NCD targets



Monitoring the implementation of SEAHEARTS

The population-based surveys using WHO STEPS approach at regular intervals will help to monitor the impact of SEAHEARTS at the population level.

The facility-based monitoring of disease management outcomes will help to measure the effectiveness of hypertension and diabetes care services in primary health care. Key indicators for hypertension and diabetes management at the facility level are:



Sources: WHO STEPS risk approach to NCD risk factor surveillance (<https://www.who.int/news-room/communicable-diseases/news/2015/05/15>)
 WHO (2022) Noncommunicable Disease Facility-based monitoring guideline: Framework, indicators and application (<https://apps.who.int/iris/handle/2018.1/264370>)
 WHO (2018) NCD Dashboard (<https://dashboards.who.int/ncd/>)

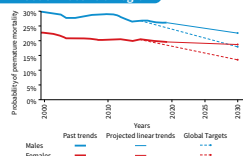


SEA HEARTS

An initiative to reduce cardiovascular disease burden in the WHO South-East Asia Region



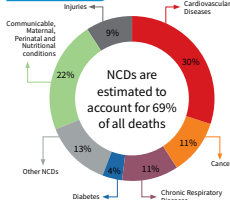
Noncommunicable Diseases (NCDs) premature mortality trends in South-East Asia Region



29% Adults are tobacco users

8 gm/day Mean population salt intake

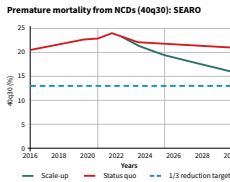
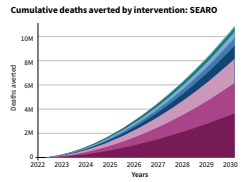
Disease burden



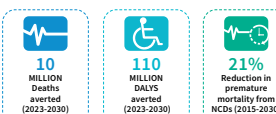
33% Adults are hypertensive

8% Adults have diabetes

HEARTS interventions: Impact on SDG 3.4 and deaths averted



- Tobacco ban/elimination
- Tobacco intersectoral policies
- Diabetes screening/treatment
- Sodium reduction
- Treatment of hyperlipidemia
- Tobacco tax
- Treatment of hypertension
- CVD secondary prevention



Sources: <https://apps.who.int/iris/handle/2018.1/264370>



"We are at a history-defining juncture. With political will and investment in primary health care, countries can accelerate SEAHEARTS strategies to reduce the cardiovascular burden in the region".

Dr. Poonam Khetrapal Singh
Regional Director, WHO South-East Asia Region

SEAHEARTS

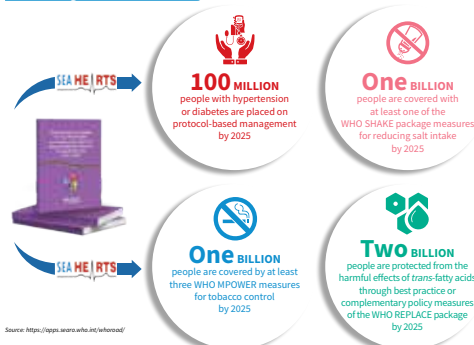
Cardiovascular Diseases (CVDs) account for a quarter of all NCD mortality in the South-East Asia Region (SE Asia Region), equating to around 3.6 million deaths annually. Most of CVD deaths are premature, occurring before 70 years of age. Hypertension and diabetes are major attributable metabolic risk factors for CVDs. The Region has in recent years made targeted efforts to scale up hypertension and diabetes treatment coverage and control, using WHO Package of Essential Noncommunicable (PEN) interventions and the technical package of HEARTS. As a way of reducing the burden of behavioural risk factors, countries in the SE Asia Region are implementing MPOWER measures for tobacco control and technical packages REPLACE for eliminating industrial-produced trans-fatty acids and SHAKE for salt reduction.

SEAHEARTS serves as a platform to bring together tobacco control, salt reduction, and elimination of trans-fatty acids along with improved hypertension and diabetes coverage and control through primary health care. This serves as the basis of the Dhaka Call to Action for accelerating the control of CVDs with four targets to be achieved by 2025.

The country-wide scale-up of SEAHEARTS interventions has the potential to reduce premature mortality from CVD significantly and to achieve the SDG targets by 2030.

Sources: <https://www.who.int/teams/noncommunicable-diseases/seahearts-for-accelerating-cvd-control>

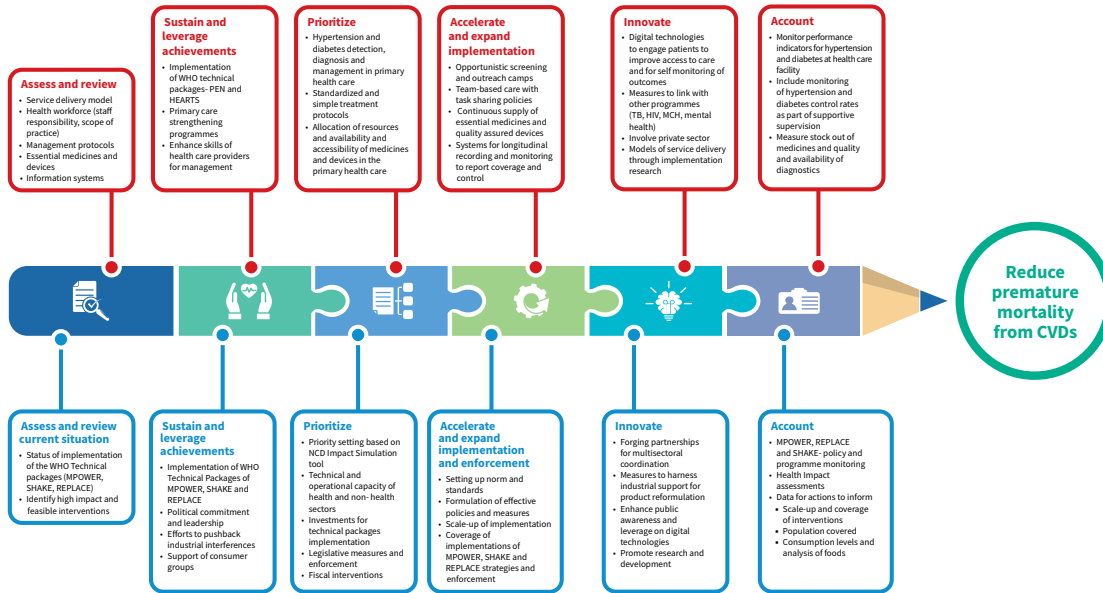
Accelerating SEAHEARTS initiative



Sources: <https://apps.who.int/iris/handle/2018.1/264370>

SEAHEARTS roadmap

Scaling up of hypertension and diabetes care in primary health



Reducing risk factors for prevention and control of cardiovascular diseases



WHO Technical packages to support SEAHEARTS

<p>Scale-up CVD management at primary health care</p>	<p>Measures for tobacco control</p>	<p>THE SALT HABIT</p>	<p>ELIMINATE INDUSTRIALLY-PRODUCED TRANS-FATTY ACIDS</p>	<p>A SAFER WORLD FREE FROM ALCOHOL RELATED HARMS</p>	
<p>H Healthy-lifestyle counselling Brief interventions as an approach to providing counselling on risk factors and encouraging people to have healthy lifestyles</p> <p>E Evidence-based treatment protocols Protocols to standardize a clinical approach to the management of hypertension, diabetes and complications</p> <p>A Access to essential medicines and technology Improve CVD medicine and technology procurement, quantification, distribution, management and handling of supplies at facility level</p> <p>R Risk-based CVD management Total risk approach to the assessment and management of hypertension, diabetes and CVDs through risk charts</p> <p>T Team-based care Team-based care and task shifting, Improving skills of health care providers, encourage self care management</p> <p>S Systems for monitoring Standardized indicators and data-collection tool, maintain longitudinal case records, conduct monthly review, reduce missed visits, measure hypertension and diabetes control rate</p>	<p>M Monitor tobacco use and prevention policies</p> <p>P Protect people from tobacco smoke</p> <p>O Offer help to quit tobacco use</p> <p>W Warn about the dangers of tobacco</p> <p>E Enforce bans on tobacco advertising, promotion and sponsorship</p> <p>R Raise taxes on tobacco</p>	<p>S Surveillance measure and monitor salt use</p> <p>H Harness industry promote reformulation of foods and meals to contain less salt</p> <p>A Adopt standards for labelling and marketing; implement standards for effective and accurate labelling and marketing of food</p> <p>K Knowledge educate and communicate to empower individuals to eat less salt</p> <p>E Environment support settings to promote healthy eating</p>	<p>R Review dietary sources of industrially-produced trans-fatty acids and the landscape for required policy change.</p> <p>P Promote the replacement of industrially-produced trans-fatty acids with healthier fats and oils.</p> <p>L Legislate or enact regulatory actions to eliminate industrially-produced trans-fatty acids.</p> <p>A Assess and monitor trans-fatty acids content in the food supply and changes in trans-fatty acids consumption in the population.</p> <p>C Create awareness of the negative health impact of trans-fatty acids among policy-makers, producers, suppliers, and the public.</p> <p>E Enforce compliance support settings with policies and regulations.</p>	<p>S Strengthen restrictions on alcohol availability</p> <p>A Advance & enforce drink driving counter measures</p> <p>F Facilitate access to screening brief interventions & treatment</p> <p>E Enforce ban/comprehensive restrictions on alcohol advertising, sponsorship & promotion</p> <p>R Raise prices on alcohol through excise taxes & pricing policies</p>	<p>Active Environments Promote safe, well maintained infrastructure, facilities and public open spaces that provide equitable access to places for walking, cycling and other physical activity.</p> <p>Active Systems Strengthen leadership, governance, multisectoral partnerships, workforce, research, advocacy and information systems to support effective coordinated policy implementation.</p> <p>Active Societies Implement behaviour change communication campaigns and build workforce capacity to change social norms.</p> <p>Active People Ensure access to opportunities, programmes and services across multiple settings to engage people of all ages and abilities in regular physical activity.</p>

Source: WHO South-East Asia Region NCD Toolkit (<https://apps.who.int/whoread/south-east-asia-region-ncd-toolkit/>)



