



Republic of North Macedonia
Ministry of Health



Institute of Public Health of
Republic North Macedonia

REPORT FROM THE NATIONAL WORKSHOP FOR STRENGTHENING COLLABORATION TO ADDRESS NCDS RISK FACTORS IN NORTH MACEDONIA

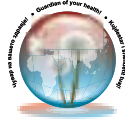
THE ROLE, CHALLENGES AND OPPORTUNITIES OF KEY PUBLIC HEALTH INSTITUTIONS



Hotel Aleksandar Palace,
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Acknowledgements

This report summarizes the evidence about non-communicable diseases (NCDs) in North Macedonia, highlighting their status as the leading cause of death and disability, as well as identifying opportunities for cooperation and networking among key institutions involved in NCD prevention. These institutions include the Ministry of Health, the Institute for Public Health (IPH), Centres for Public Health (CPH), Health Centers, and primary health care (PHC). The insights were gathered during the National Workshop for Strengthening Collaboration to Address NCDs Risk Factors in North Macedonia, held in April 2024 in Skopje, North Macedonia.

The report was written by Prof. Elena Kjosevska, Head of the Department for Health Promotion and Monitoring of Diseases at the Institute for Public Health of RNM, and Prof. Igor Spiroski, WHO Associate for Non-Communicable Diseases at the Institute for Public Health of RNM.

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We also express our gratitude to Dr. Marija Vrckovska from the Centre of Public Health Bitola, Prof. Dr. Valentina Simonovska from the Center of Public Health Skopje, and Ass. Dr. Dragana Bislimovska from the Institute for Occupational Health, WHO Collaborative Centre, for their invaluable contributions.

Additionally, we thank Prof. Dr. Jovanka Karadzinska Bislimovska from the Institute for Occupational Health, Prof. Dr. Katarina Stavric from the Family Medicine Centre, Prof. Dr. Igor Spiroski from the National Public Health Institute, and Prof. Dr. Elena Kjosevska for facilitating the group discussions during the workshop.

We are grateful to the World Health Organization Country Office in North Macedonia for their support in initiating discussions to strengthen collaboration and coordination among the key national institutions responsible for NCD prevention.

Finally, we acknowledge the significant contributions of Ms. Margarita Spasenoska, National Professional Officer for Public Health and Dr. Pia Vracko, WHO Advisor on Health Policy at the WHO Office in North Macedonia.

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List of abbreviations

BMI	Body mass index
CME	Continuing Medical Education
CNDC	Condition Care
CPH	Centres for Public Health
EU	European Union
ICOH	International Commission on Occupational Health
IOH	Institute for Occupational Health, WHO Collaborating Centre
IPH	Institute of Public Health
MoH	Ministry of Health
NAPHP	National Action Plan for Health Promotion
NCDs	Non-communicable diseases ()
OSH	Occupational safety and health
PHC	Primary health care
PHIs	Public Health Institutions
RNM	Republic of North Macedonia
SEENWH	South East European Network on Workers Health
WHO CO	World Health Organization, Country Office

Introduction

Non-communicable diseases (NCDs) are the leading cause of death and disability in North Macedonia, and are also the cause of approximately 95% of all deaths in the country. The most common NCDs include cardiovascular disease, cancer, chronic respiratory disease, and diabetes. An aging population combined with high levels of behavioral risk factors such as high blood pressure, high blood glucose and fat levels, and excess body weight contribute to high rates of mortality and disability. Compared to the European Union average, life expectancy at birth is 6.0 years lower for women and 4.7 years lower for men in North Macedonia. These risk factors are often interrelated and are influenced by social, economic, commercial, and environmental adverse health impacts.

As part of the two-year cooperation agreement between the World Health Organization and the Ministry of Health 2024-2025, the workshop was organized with the aim of providing a platform for discussion as well as for consideration of opportunities for cooperation and networking between the Ministry of Health, the key institutions for public health and primary health care (PHC). The workshop aimed to connect the key stakeholders to assess the current situation, identify priority areas of action, and develop a coordinated action plan for NCDs prevention and control. The workshop focused on the role, challenges, and opportunities of key public health institutions in North Macedonia to address NCDs risk factors and promote public health, as well as to enhance their cooperation with primary health care providers and the teams for preventive health care in health centers.

The objectives of the workshop were:

- Foster closer collaboration between the Ministry of Health and key public health institutions (Institute of Public Health, Public Health Centres, and Institute for Occupational Health, WHO Collaborating Centre) to address NCDs risk factors effectively.
- Highlight the critical role of key public health institutions in addressing NCDs risk factors and promote a shared understanding of prevention efforts as integral to the Ministry of Health's Public Health Program.
- Identify and discuss challenges faced by public health institutions, including resource constraints, infrastructure gaps, and barriers to intersectoral collaboration, in addressing NCDs risk factors.
- Explore opportunities for collaboration and synergies among public health institutions to enhance NCDs prevention efforts, emphasizing the importance of sharing capacities, best practices and coordinating activities.
- Develop conclusions about the next steps for advancing NCDs prevention efforts through key public health institutions, including concrete actions to improve coordination, resource allocation, and implementation of prevention strategies.

The workshop program consisted of 3 sessions:

Session 1. Introduction to the situation with the following objectives:

1. Understanding the key risk factors contributing to non-communicable diseases (NCDs) in North Macedonia, including their prevalence and impact on public health.
2. Providing an overview of the roles and contributions of key public health institutions in North Macedonia, such as the Institute for Public Health (IPH) of RNM, the Centres for Public Health, and the Institute of Occupational Medicine - WHO Collaborative Centre, in terms of addressing NCDs risk factors and the promotion of public health.
3. Understanding how the National Public Health Program comprehensively addresses the various risk factors for NCDs, including the use of tobacco, unhealthy diet, physical inactivity, and harmful alcohol consumption.

Session 2: Cooperation between institutions for public health and the primary health care in terms of addressing the NCDs risk factors, with the following objectives:

1. Identification of the challenges and opportunities in the cooperation between public health institutions and PHC service providers, as well as the units for preventive health care in health centres.
2. Making recommendations on aspects that could be improved.

Session 3: Conclusions and next steps – implemented through group work, with the following objectives:

1. Identifying the three key next steps/priorities for strengthening the coordination between the public health institutions when addressing the NCDs risk factors
2. Identifying the three key next steps for strengthening the role of the public health institutions in terms of addressing the NCDs risk factors, and more specifically regarding:
3. Interventions at the population level of PHIs and PHC (and for inter-sectoral cooperation and with community-based approach)
4. Individual-level interventions (in cooperation with the PHC and the units for preventive health care in health centres)

The participants at the workshop were the representatives of the Institute of Public Health, public health centres, Association of Nurses and Midwives, Association of Nurses, Midwives and Dental Nurses, Association of General Practitioners and Doctors Specialists in Family Medicine, but unfortunately, the representatives of the preventive teams from the health centres in the state did not attend the workshop.

Team for the organization of the workshop

Prof. Dr Elena Kjosevska, MD, PhD,

Head of Department for Health Promotion and Monitoring of Diseases, Institute for Public Health

Prof. Dr Igor Spiroski, MD, PhD,

WHO associate for non-communicable diseases, Institute for Public Health

Prof. Dr Jovanka Bislimovska, MD, PhD,

Institute for Occupational Health of North Macedonia, WHO Collaborative Centre

Prof. Dr Katarina Stavrikj, MD, PhD,

Head of the Centre for Family Medicine, Faculty of Medicine at University St. Cyril and Methodius

Ms Nermina Fakovikj,

Deputy Head of Department for Primary and Preventive Health Care, Ministry of Health

Dr Nikola Grpchevski, MD,

State Advisor for Public Health, Ministry of Health

Dr Pia Vrachko, MD,

Advisor on Health Policy, WHO Office in North Macedonia

Ms Margarita Spasenovska,


National Professional Officer, Public Health, WHO Office in North Macedonia

Opening and introductory address

Prof. Dr. Kjosevska, MD, PhD, Head of the Department for Health Promotion and Monitoring of Diseases at the National Institute for Public Health, presented the main goal of the workshop: to address the challenges and opportunities for better action in the future, aiming to establish improved cooperation among key institutions. She emphasized the importance of recognizing the roles of each institution in the national health sector for the prevention of NCDs, and highlighted the need for strengthening collaboration between national institutions. She underscored the need to identify priority areas for action and to develop a coordinated action plan for the prevention and control of NCDs.



Photo 1: Ms Nermina Fakovikj, Ministry of Health giving her opening address



Mrs. Nermina Fakovikj, representing the Ministry of Health, highlighted that 95% of deaths are due to non-communicable diseases, underscoring the critical need for mutual cooperation and the pivotal role of inter-institutional collaboration. She noted that past cooperation between institutions was stronger, emphasizing the necessity for the Ministry of Health and key institutions to refocus their efforts in this area. Mrs. Fakovikj proposed initiating monthly meetings to assess the situation and emphasized the importance of preparing an action plan.

Dr. Nikola Grpchevski, Public Health State Advisor of the Ministry of Health, emphasized in his opening address: “Public health activity is yet to come, let’s make joint efforts today for a better future tomorrow.” He highlighted the significance of cooperation between the Ministry of Health, the Institute of Public Health of RNM, the 10 Centers for Public Health, and primary health care.

Dr. Pia Vrachko, WHO Health Policy Advisor, pointed out that non-communicable diseases are a multifaceted issue requiring comprehensive approaches, with public health institutions and stakeholder coordination playing central roles. She stressed the need for the Ministry of Health to coordinate with other relevant institutions, such as the Ministry of Education and Science. Dr. Vrachko highlighted that post-pandemic, there is a pressing need to address non-communicable disease prevention. She emphasized the WHO readiness to support the national key institutions to improve the efficient addressing of non-communicable diseases and associated risk factors.

Summary of plenary presentations

Session 1: Setting the scene



Photo 2: Prof. Dr. Igor Spiroski, National Public Health Institute, presenting the situation regarding the risk factors for non-communicable diseases in the Republic of North Macedonia and the role of key national institutions in the prevention of NCDs

Prof. Dr. Igor Spiroski, MD, PhD, presented the specific WHO framework for monitoring NCDs until 2025, presented the burden of NCDs risks among the population of the WHO European Region, as well as in N. Macedonia. The probability of premature mortality among the population of Macedonia due to the most common NCDs is 23%. He pointed out that in RNM, the greatest impact on disability and mortality from NCDs can be attributed to: high blood pressure, tobacco use, high body mass index (BMI), risks related to nutrition, alcohol use, etc. The most prevalent risk factors from a metabolic point of view are as follows: high blood pressure, high units of glucose in the blood, high BMI, which is continuously increasing on an annual basis in adolescents and adults, as well as excessive salt intake among the population of N. Macedonia. Regarding risky behaviour, the most common risk factors are as follows: use of alcohol and tobacco. According to the latest research of the IPH, the number of active smokers in North Macedonia is 47.8%, with a very low percentage of only 5% of smokers who managed to quit tobacco. In the area of environmental risks, the most prevalent risk factor is air pollution, to which, we as a country, should commit ourselves

to and work on as much as possible because we have more than 2000 deaths per year due to air pollution. Prof. Spiroski, MD, PhD, shared the programs that focus on non-communicable diseases and addressing the risk factors thereof. There are as follows:

- National annual program for public health;
- Program “Health for all”;
- Program for medical examinations of pupils and students;
- Program for early detection and screening of malignant diseases;
- Program for the provision of insulin, glucagon, insulin needles and strips for measuring sugar, insulin pumps with consumables and sensors for continuous measurement of glycaemia.

Dr. Nikola Grpchevski, representing the Ministry of Health, provided an insightful overview of the National annual public health program, detailing discussions on the restructuring of prevention programs with EU support. He highlighted the Ministry’s collaboration with EU experts to enhance national public health programs, including plans to streamline program grouping for increased efficiency. Dr. Grpchevski stressed the importance of enhanced monitoring and evaluation for preventive program implementation, advocating for joint efforts between the Ministry of Health and other relevant institutions.- Examples of initiatives for prevention of NCDs risk factors in the Republic of North Macedonia.



Photo 3: Prof. Dr Valentina Simonovska, MD, PhD, Social Medicine Specialist, Center for Public Health Skopje presenting an example of activity from her institution

Prof. Dr. Valentina Simonovska, MD, PhD, eloquently detailed the pivotal role of the Center for Public Health Skopje in addressing non-communicable disease (NCD) risk factors across the Skopje region, encompassing 17 municipalities, including 10 urban and 7 rural areas. She emphasized that data analysis serves as a roadmap, crucial for verifying and developing activities to detect specific chronic NCD risk factors. When a particular risk factor is identified as a primary cause of high prevalence, the center prepares publications to underscore the region's public health priorities.

To achieve these goals, the Centre for Public Health Skopje conducts comprehensive health status analyses, delivers educational lectures, provides counseling, develops promotional materials, and shares professional content on its website. Prof. Simonovska highlighted several challenges in NCD risk factor prevention, including increasing prevalence rates, population aging, potential resurgences of acute communicable diseases in epidemic form, and specific NCD-risk factor correlations.

In terms of opportunities, she stressed the critical role of public education in promoting primary prevention. She advocated for strengthening healthcare by enhancing access to quality services, establishing an effective network of health facilities to improve cooperation and communication, increasing the number of healthcare personnel, enhancing the skills of healthcare professionals, and expanding preventive activities across all healthcare.



Photo 4: Dr Marija Vrchkovska, MD, Social Medicine Specialist, Centre for Public Health Bitola presenting an example of activity from her institution


Dr. Marija Vrchkovska outlined the vital role of the Centre for Public Health Bitola in addressing non-communicable disease (NCD) risk factors within a region comprising six municipalities. The center primarily conducts surveys among targeted populations with identified risk factors, followed by organizing a range of educational activities such as lectures, presentations, exhibitions, tribunes, and competitions to raise awareness and promote healthier lifestyles. These efforts are coupled with assessments of risk factors and the implementation of health education activities aimed at reducing or eliminating them, followed by thorough evaluations of the outcomes.

For the prevention of NCD risk factors in 2024, CPH Bitola has planned activities including the assessment of risk factors, increased counselling for youth and adolescents at a smoking cessation centre, and research on the connections between individual, familial, municipal, and environmental alcohol consumption.

Dr. Vrchkovska identified nutrition as a significant challenge in NCD risk factor prevention, stressing the importance of addressing deficiencies or excesses, ensuring nutrient adequacy, and promoting optimal health. To address this challenge, she highlighted the need to strengthen cooperation between the community and the food industry to reduce the production of high-glycaemic index foods. Additionally, she emphasized the importance of enhancing cooperation between CPH Bitola and the Ministry of Education and Science, particularly through the development and distribution of a manual on chronic non-communicable diseases, their risks, and prevention strategies. This manual aims to improve the quality of life for young people, promote self-control, and encourage responsibility for improving and preserving health.



Photo 5: Ass. Dr. Dragana Bislimovska providing an example from the NCD's prevention work by the Institute for Occupational Health, WHO Collaborative Centre, Skopje



Ass. Dr. Dragana Bislimovska presented the role of the IOH, WHO Collaborative Centre in terms of addressing the risk factors for NCDs in the territory of the entire country from the aspect of scientific research, educational, and promotional activity. In this context, the Institute for Occupational Medicine conducts targeted research, and studies, for specific NCDs, but also education and training of students, postgraduates, workers, employers, doctors of various profiles, experts, etc. As part of their work, preventive physical examinations are regularly carried out at the individual level, the level of the entire group, or the entire population. Dr. Bislimovska emphasized that in order to promote physical activity at the workplace, the initiative for promoting physical activity at the workplace will be continued, policies will be created to increase the awareness of physical activity at the workplace, a guide will be developed for the implementation of the active workplace program, and campaigns and other activities will be organized in cooperation with the social media. Regarding the prevention of the effects of air pollution among workers who work outdoors, initiatives will be taken to reduce working time outdoors, raise the awareness of employers and workers, and stimulate initiatives for occupational safety and health, environmental protection, green workplaces, etc. Dr. Bislimovska highlighted the following as challenges in the prevention of risk factors:

- Interactions with targeted groups such as workers, employers, health professionals, etc.;
- Development of different models of education, counselling, as well as interventions, to increase awareness;
- Establishment of multi-sectoral operational mechanisms.

Regarding the opportunities, she emphasized that in the future, work will be done in terms of addressing NCDs and risk factors by strengthening cooperation at the national level, through the network for occupational medicine, through the National Council for OSH (Occupational Safety and Health) of RNM, joint activities with IPH, CPH as well as the general practitioners from PHC, while at the international level, the cooperation with the SEENWH (South East European Network on Workers Health) and ICOH (International Commission on Occupational Health) will be strengthened.

Dr. Pia Vrachko, WHO Health Policy Advisor, provided an example from collaboration of institutions for prevention of NCDs risk factors in Slovenia. She highlighted in her presentation the collaborative approach of public health institutions in Slovenia to combat non-communicable disease (NCD) risk factors. She emphasized the importance of intersectoral cooperation and public health policies that focus on individual risk factor screening and promoting healthy lifestyles through primary health care.

Dr. Vrachko emphasized the key role of the Ministry of Health and the Institute of Public Health in defining policies and coordinating their implementation. She stressed the need for close collaboration with other public health institutions and primary health care providers. Dr. Vrachko also noted that some risk factors fall outside the Ministry of Health's jurisdiction, underscoring the importance of collaboration with other institutions and ministries such as the Ministry of Environment and the Ministry of Education and Science.



Photo 6: Dr. Pia Vrachko presenting about the role of public health institutions in Slovenia in the prevention of risk factors for the occurrence of NCDs

In the context of NCD prevention and control, the National Institute of Public Health of Slovenia implements a range of activities including epidemiological surveillance, management of health data and E-health, development and implementation of health policies and strategies, health education, health promotion and screening programs, advice and support to health institutions, and cooperation with other stakeholders at national, regional and local levels.

Dr. Vrachko highlighted the role of Health Promotion Centres within the Community primary health care centers, led by health promotion nurses, in the fight against NCDs in Slovenia. She emphasized that health promotion and disease prevention starts before birth and continues throughout life.

“Health in the municipalities” is an online application developed by the National Institute of Public Health in collaboration with other organizations. It serves as a source of information on key health indicators in Slovenian areas, presenting data at various levels including Slovenia, statistical regions, administrative units, and municipalities. Dr. Vrachko emphasized that this data is used to inform decision-makers, the media, experts, and the general public, helping them make informed decisions and take actions to improve population health based on evidence on health, health determinants, and risk factors.

Session 2: The collaboration between the public health institutions and primary health care in addressing the NCDs risk factors – what can be improved?

Prof. Katarina Stavrikj, MD, PhD provided an overview of the current cooperation between public health institutions and the primary health care service providers in North Macedonia as well as the challenges and opportunities. In her presentation, Prof. Katarina Stavrikj, MD, PhD, presented the basic principles on which family medicine is based: care focused on the individual, health equality, continuity in work, science, cooperation, orientation towards the community, and professionalism. She pointed out the following challenges of family medicine: population aging, CNDC (Condition Care), mental health issues, technology, prevention, lack of staff, as well as the need for teamwork. Regarding the challenges, she indicated the health promotion and disease prevention. Prof. Stavrikj, MD, PhD, pointed to the need for 50% of patients to be invited to a preventive examination by the Health Insurance Fund of Macedonia, she indicated the low level of health education as a barrier, as well as the negative attitudes of patients towards preventive examinations. As a challenge to which attention should be paid in the future, she indicated the need for further development of the information system in primary health care. Prof. Stavrikj, MD, PhD, presented the multidisciplinary team, which consists of: nurse, pharmacist, general practitioner, visiting nurse, and another associate, and pointed out the need for joint and teamwork to achieve the objective, which is prevention and care for the patients.

Group work

The following topics were discussed during the group work:

Group work 1: Collaboration between key public health institutions, challenges, and strategies to improve the effectiveness of NCDs prevention and community engagement

1. How can the Ministry of Health and key public health institutions collaborate more effectively to address NCDs risk factors?
2. What are the main challenges faced by public health institutions in terms of addressing NCDs risk factors at the local level? How can these challenges be overcome and what strategies can be implemented to improve the effectiveness of NCDs prevention efforts?
3. What should be the role of public health institutions in terms of engagement with the community for NCDs prevention?

Group work 2: Communication and cooperation with the PHC

1. How can the communication between the Centres for Public Health and PHC practices/preventive health care teams in health centres be strengthened in a sustainable way?
2. What could be done at the national and regional level?



Photos 7, 8, 9 and 10: Group work discussions

Key results from the group work discussions

Group work 1. Collaboration between key public health institutions, challenges and strategies to improve the effectiveness of NCDs prevention and community engagement	<p>Challenges:</p> <ul style="list-style-type: none">• Insufficient staff, most of which aged around 55-65, in the Centres for Public Health (CPH);• „My Appointment” contains incorrect information (electronic data is not yet received from all health institutions in public and private health care);• Inadequate and untimely completion of reports for NCD registers by healthcare providers’ staff;• Inefficiency of the Department for primary health care and preventive health activity within the Ministry of Health due to an excessive amount of work, and insufficient and inadequate according to the profile of the staff, which affects the quality of the activities performed• Decreasing funds for the National Action Plan for Health Promotion (NAPHP);• Lack of government and Ministry of Health support for public health development;• Poor cooperation between CPH and municipalities;• Poor collaboration with the preventive teams in the health centers; <p>Opportunities:</p> <ul style="list-style-type: none">• Establishment of a special Department only for public health within the Ministry of Health;• Identification of risk factors in specific populations, proposal of measures, and creation of targeted programmes, with the Ministry of Health, considering involvement of the CPH;• Standardization of communication between CPH, IPH and the Ministry of Health;• Training health staff in proper medical documentation management;• Strengthening cooperation with the Ministry of Education and Science for health education in schools;• Introduction of visiting nursing as a subject in secondary medical schools;• Increase in visiting nurses and enhanced cooperation with CPH;• Allowance for appropriate substitution of health staff in CPH by Ministry of Health and Ministry of Finance;• Support from the Ministry of Health for CPH to create informative websites• Collaboration across all CPH should be created and tasks divided among all;• Activation of National Council for Public Health and local councils for public health according to the Public Health Law who will work on Development of Action Plans for public health at the local level;• Appointment of a municipal coordinator for communication with social medicine specialists at CPH;• Creation of a local community profile by CPH, supported by the Ministry of Health;• Legal support for proposed measures;• Increased commitment and support from the State Statistical Office for health statistics reporting;• Profiling of staff managing proposed structures;• Intersectoral approach development with the Ministry of Education and Science, Ministry of Labour and Social Policy, Ministry of Environment, and inspectorates;
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	<ul style="list-style-type: none">• Engagement of the business community;• Cooperation with the non-governmental sector;• More frequent communication between the Ministry of Health and CPH and the IOH• Unification of data collection for risk factors and systematic and comprehensive approach to data collection; it should be agreed on how data will be used (develop indicators).• Integration with “My Appointment” system• NCD activities budget as a special financing channel• Public call for preventive activities in high-risk regions• Financial plan alignment with needs and activities• Budget progressiveness (increase)• Increased income from excise taxes for NAPHP• Pilot of new strategies for cooperation between the Ministry of Health, IPH, and CPH in municipalities with doctor mayors• Inclusion of general hospitals with expanded activity in the cooperation process
Group work 2. Cooperation between the institutions for public health and primary health care in PHIs and health centres	Proposals for strengthening the cooperation between the public health institutions and PHC providers, as well as the preventive teams in the health centres: <ul style="list-style-type: none">• Establishment of a Centre for Health Promotion within the Health Centres, serving as a vital link between the Centre for Public Health (CPH), Primary Health Care (PHC), and preventive teams;• Clear definition of the functions, roles, tasks, and activities of the Health Promotion Centres within health centres;• Development of joint protocols and activities in coordination with the Ministry of Health, Institute of Public Health (IPH), and the Centre for Family Medicine;• Sharing of educational materials and organizing joint Continuing Medical Education (CME) events;• Open cooperation and joint activities during physical examinations;• Increased responsibility for data collection and exchange with a focus on quality control;• Integration into the IT health system for efficient information exchange;• Utilization of social networks to raise awareness among the population;• Research for the detection of risk factors using WHO tools/tests such as those for diabetes and nicotine addiction;• Implementation of a digital solution to connect physical examination results of students and workers with their general practitioners, ensuring continuity in information and problem resolution for established health issues;• Preparation and sharing of public health information by CPH with doctors from the region to facilitate planned and unified education.• Organization of joint campaigns and educational activities in the local community;• Distribution of informational material in outpatient clinics;• Holding joint meetings with Health Centers and general practitioners at the local level;



Photo 11: Ms Nadica Totikj, National Public Health Institute taking notes of all the discussions

Conclusions

Collaboration and Cooperation: Addressing NCDs requires improved cooperation among the public health institutions and with the Ministry of Health at the national level, as well as Primary Health Care (PHC) with municipalities at the local level. Currently, this cooperation is lacking, necessitating greater involvement of all parties through short-term, specific activities promoting healthy lifestyles and regular screening examinations for early detection of NCD risk factors.

Also, the efforts to address non-communicable diseases (NCDs) in North Macedonia require strong intersectoral cooperation, involving not only the Ministry of Health but also other relevant ministries such as the Ministry of Education and Science, Ministry of Environment, and Ministry of Finance.

Regional Coordination: There is also a gap in coordination between regional public health centres and other preventive health care institutions and PHC/PHIs with preventive teams in health centres for NCD prevention activities. Bridging this coordination gap is essential for the effective implementation of NCD prevention strategies at the regional level.

Policy Development: There is a need for the development and implementation of evidence-based policies and strategies to address NCD risk factors and improve health outcomes. A National Action Plan for Addressing NCDs Risk Factors has been developed in 2018 with WHO support, but was not adopted by the Government and implemented, and should be re-visited.

Health Promotion and Education: There should be a significant focus on planned and unified health promotion and education countrywide, lead by the public health centres, including the need to strengthen health education in schools, introduce health-related subjects in medical schools, and increase public awareness through various channels such as social media.

Capacity Building: There is a recognized need for capacity building, including training programs for health professionals in areas related to prevention of NCDs risk factors.

Data Collection and Analysis: Improving data collection, analysis, and reporting systems is crucial for effective decision-making and monitoring progress in NCD prevention and control efforts.

Resource Allocation: Adequate allocation of resources, including funding and staffing, is essential for the successful implementation of NCD prevention programs.

Community Engagement: Engaging communities and local stakeholders in NCD prevention efforts is key to ensuring that interventions are relevant and effective. A common strategic approach for community engagement related to NCDs prevention needs to be developed.

Future steps and recommendations for actions

Immediate priorities

1. Establishment of a National Committee for Non-Communicable Diseases within the Ministry of Health, comprising representatives from the government, business, and non-governmental sectors, as well as healthcare professionals from Primary Health Care (PHC), ambulance services, home visit teams, visiting nursing, Centres for Public Health (CPH), Institute of Public Health, Ministry of Health, Ministry of Finance, Ministry of Education, Ministry of Environment, etc. with specific Terms of Reference for the Committee outlining its tasks and activities;
2. Proactive engagement of the Ministry of Health for activation of the National Council for Public Health in accordance with the Law on Public Health;
3. Revision of the Action Plan for prevention of NCDs risk factors developed by WHO in 2018, for its approval by the Government by the end of 2024;
4. Organizing a workshop with the directors of the Health Centres to discuss how the health centers' role in preventing NCDs can be strengthened and how the health centers can better collaborate with the national public health institutions on this topic.

Other priorities

A) Enhancing cooperation between the Ministry of Health and the 10 Centres for Public Health with municipalities by:

- Increasing the number of health workers (doctors, health statisticians, sanitary technicians, etc.) through new hires and replacement of retired staff at CPH.
- Improving cooperation between CPH and municipalities.
- Ensuring the mandatory operation of the National Council for Public Health and municipal councils for public health.
- Enhancing health statistics, digitization, and data integration.
- Organizing quarterly meetings at the Ministry of Health with the Department of Preventive and Primary Health Care and the State Counsellor for Public Health to address challenges and find solutions.
- Reviewing and preparing a new National Action Plan for NCD prevention, incorporating proposals from the workshop.
- Including target groups in future steps to collectively focus on success in combating NCDs.
- Developing Local Action Plans at the municipal level.

B) Enhancing cooperation between the 10 CPH and PHC by:

- Establishing Health Promotion Centres within Health Centres to link CPH, PHC, and preventive teams, with clearly defined functions, roles, tasks, and activities.
- Developing joint protocols for promotional activities in coordination with the Ministry of Health, IPH, and Centre for Family Medicine.
- Increasing promotion of healthy lifestyles and prevention of NCD risk factors through CPH activities at the local level with PHIs and preventive teams, utilizing media, and social networks, and organizing public campaigns to raise population awareness with citizen engagement.
- Ensuring continuous information exchange between IPH, CPH, and PHIs to enhance PHC capacity in timely recognition of NCD risk factors and early interventions, using available WHO tools (e.g., brief interventions for NCD risk factors in primary care).

Annex 1: List of participants

MoH, IPH, CPH		
1.	Nermina Fakovic, MoH	nermina.fakovic@zdravstvo.gov.mk
2.	Igor Spiroski, IPH	igor.spiroski@medf.ukim.edu.mk
3.	Nikola Grpchevski, MoH	nikola.grpcevski@zdravstvo.gov.mk
4.	Sanja Prosheva, IPH	bab_mk@yahoo.com
5.	Elena Kjosevska, IPH	kosevska@yahoo.com
6.	Tanja Lekovska Stoicovska, IPH	tslekovska@gmail.com
7.	Liduska Vasilevska, IPH	liduskav@yahoo.com
8.	Marina Bacanovikj, IPH	marina.bachanovikj@gmail.com
9.	Jasmina Shakjiri, IPH	jasminashakjiri@gmail.com
10.	Daniela Dukovska, IPH	danieladukovska@yahoo.com
11.	Dea Karanfilovska, IPH	dea.karanfilovska5@gmail.com
12.	Martin Petrovski, IPH	martin.petrovski.medf@gmail.com
13.	Bisera Rahic, IPH	bibarahic@gmail.com
14.	Aleksandar Kardasevski, IPH	a.kardasevski@gmail.com
15.	Nadica Totikj, IPH	nadicatotikjiph@gmail.com
16.	Valentina Simonovska, CPH Skopje	valentina.simonovska@gmail.com
17.	Biljana Dzikovska, CPH Skopje	biljanadzikovska@yahoo.com
18.	Blerta Shahini Azizi, CPH Kumanovo	blerta.shahini89@gmail.com
19.	Radmila Maksimovska Simonovska, CPH Kumanovo	radmila_ms@yahoo.com
20.	Marija Vrchakovska, CPH Bitola	mvrckovska@yahoo.com
21.	Jovan Todorovski, CPH Bitola	tel77816816@gmail.com (Email na Todorovski)
22.	Daniela Chingoska, CPH Ohrid	daniela.chingo@gmail.com
23.	Petar Ohanesjan, CPH Prilep	pohanesjan@yahoo.com
24.	Aksinja Garbeska-Kebakoska, CPH Prilep	garbeska_kebakoska@yahoo.com
25.	Katarina Vidoevska, CPH Tetovo	katarina.vidoeska@gmail.com;
26.	Faton Ademi, CPH Tetovo	drfatonademi@hotmail.com
27.	Ivana Gjorgjievska, CPH Veles	iv.gorgjievska@hotmail.com
28.	Snezana Petrova, CPH Veles	snezana-petrova@hotmail.com
29.	Pavlina Velkova, CPH Veles	velkovapavlina@yahoo.com
30.	Sanja Nakova Ordeva, CPH Shtip	sanjanakova90@gmail.com
31.	Postolovska Marija, CPH Kochani	marijaviii4@yahoo.com
32.	Goce Serafimov, CPH Kochani	goce.serafimov@gmail.com

INSTITUTE OF OCCUPATIONAL MEDICINE		
33.	Dragana Bislimovska	dbislimovska@gmail.com;
34.	Jovanka Bislimovska	bislimovska_j@yahoo.com
35.	Maja Panajotovikj Radevska	majapr2000@yahoo.com
36.	Aneta Atanasovska	aneta.atanasovska@yahoo.com
CENTRE FOR FAMILY MEDICINE, FACULTY OF MEDICINE AT UNIVERSITY "ST. CYRIL AND METHODIUS"		
37.	Katarina Stavrikj	kstavric@hotmail.com
38.	Miroslava Sevcenko	miroslava.shevchenko@gmail.com
ASSOCIATIONS		
39.	Association of nurses, technicians, midwives and dental nurses "FOR US" Gordana Beshliovska	goca_besliovska@yahoo.com
40.	Association of nurses, technicians, midwives and dental nurses "FOR US" Tatjana Cvetkovska	tatjana.cvetkovska@yahoo.com
41.	Macedonian association of nurses and midwives Velka Lukicj	velka.lukic@gmail.com;
NGOs		
42.	Red Cross of MKD Teodora Krstevska	krstevskateodora@live.com;
43.	Red Cross of MKD Natasha Kostova	kostova_natasa@hotmail.com;
WHO CO		
44.	Margarita Spasenovska	spasenovskam@who.int
45.	Pia Vracko	vrackop@who.int
46.	Svetlana Petrushevska	petrushevskas@who.int

Annex 2: Program of the workshop

9:00-9:30	Registration
9:30-10:00	Opening and welcome <ul style="list-style-type: none"> • Ms Nermina Fakovic, Deputy Head of the Unit for Primary and Preventive Health Care, Ministry of Health • Dr Nikola Grpcevski, Public Health Advisor, Ministry of Health • Dr Pia Vracko, WHO Advisor on Health Policy • Prof Dr Elena Kosevska, Head of Department for Health Promotion and Monitoring of Diseases, National Public Health Institute <ul style="list-style-type: none"> • Overview of the program • Introduction of speakers and participants <p>Moderator:</p> <ul style="list-style-type: none"> • Prof Dr Elena Kosevska, Head of Department for Health Promotion and Monitoring of Diseases, National Public Health Institute
10:00-11:10	Session 1. Setting the scene <p>Situational Overview of NCDs Risk Factors in North Macedonia and the roles of key national institutions in the prevention of NCDs</p> <ul style="list-style-type: none"> • Prof Dr Igor Spiroski, WHO focal point for NCDs, National Public Health Institute (15 min) <p>Overview of the National public health program and information about the currently ongoing discussions for restructuring of the MoH preventive programs with EU support</p> <ul style="list-style-type: none"> • Dr Nikola Grpcevski, Ministry of Health, Public Health Advisor (10 min) <p>Examples of initiatives in preventing NCD Risk Factors</p> <ul style="list-style-type: none"> • Dr Valentina Simonovska, Public health centre Skopje (7 min) • Dr Marija Vrckovska, Public health centre Bitola (7 min) • Dr Dragana Bislimovska, Institute for Occupational Health (7 min) <p>Examples from other countries – the role of public health institutions in Slovenia in the prevention of NCDs risk factors</p> <ul style="list-style-type: none"> • Dr Pia Vracko, WHO Advisor on Health Policy (10 min) <p>Learning objectives:</p> <ol style="list-style-type: none"> 1. Understand the key risk factors contributing to non-communicable diseases (NCDs) in North Macedonia, including their prevalence and impact on public health. 2. Provide an overview of the roles and contributions of key public health institutions in North Macedonia, such as the Institute of Public Health Institute, Public Health Centres, and Institute for Occupational Health, in addressing NCD risk factors and promoting public health. 3. Understand how the National Public Health Program addresses various NCDs risk factors comprehensively, including tobacco use, unhealthy diet, physical inactivity, and harmful alcohol consumption. <p>Plenary questions (10 min)</p>

11:10 - 11:40	Tea/Coffee Break
11:40 - 12:45	<p>Group work</p> <p>Introduction to group work</p> <ul style="list-style-type: none"> • Prof Dr Igor Spiroski, WHO focal point for NCDs, National Public Health Institute (15 min) <p>Group work topics:</p> <ol style="list-style-type: none"> 1. How can the Ministry of Health and key public health institutions collaborate more effectively to address NCDs risk factors? What specific roles and responsibilities should each institution play in this collaboration? 2. What are the main challenges faced by public health institutions in addressing NCDs risk factors at the local level? How can these challenges be overcome, and what strategies can be implemented to improve the effectiveness of NCDs prevention efforts? 3. What should be the role of public health institutions in community engagement for the prevention of NCDs?
12:45 - 13:45	Lunch
13:45 - 14:30	Feedback from the group work and plenary discussion
14:30 - 15:30	<p>Session 2: The collaboration between the public health institutions and primary health care in addressing the NCDs risk factors – what can be improved?</p> <p>Moderator: Prof Dr Elena Kosevska, IPH</p> <p>Introductory presentation</p> <p>Overview of the current collaboration between public health institutions and primary health care providers in North Macedonia, challenges and opportunities</p> <p>Prof Dr Katarina Stavric, Family medicine centre Skopje (10 min)</p> <p>Group work: (20 min)</p> <ol style="list-style-type: none"> 1. Communication and collaboration with PHC: How can the communication between the Centres for Public Health and the PHC practices / Preventive teams in the health centres be strengthened in a sustainable manner? What could be done at national and regional levels? <p>Feedback from the group work (15 min)</p> <p>Session of Q&A (10 min)</p> <p>Learning objectives:</p> <ol style="list-style-type: none"> 1. Identify the challenges and opportunities in the collaboration between the public health institutions and the PHC providers as well as Preventive care units within the health centres. 2. Provide recommendation on the aspects that could be improved.

15:30 – 15:45	Short coffee break
15:45 - 16:45	<p data-bbox="363 508 815 539">Session 3: Conclusions and next steps</p> <p data-bbox="363 573 1118 604"><i>Moderator: Prof Dr Elena Kosevska, National Public Health Institute</i></p> <p data-bbox="363 636 619 667">Group work: (20 min)</p> <ol data-bbox="363 696 1430 999" style="list-style-type: none"> <li data-bbox="363 696 1430 757">1. Identify three key next steps/priorities for strengthening of the coordination between the public health institutions in addressing NCDs risk factors <li data-bbox="363 786 1430 999">2. Identify three key next steps for strengthening the role of the public health institutions in addressing NCDs risk factors, and specifically for: <ol data-bbox="395 880 1406 999" style="list-style-type: none"> <li data-bbox="395 880 1406 938">a. population-level interventions PHIs and PHCs (both for inter-sectoral collaboration and community approaches) <li data-bbox="395 943 1406 999">b. individual-level interventions (in collaboration with PHC providers and preventive care units in the health centers) <p data-bbox="363 1028 839 1059">Presentation of the group work (10 min)</p> <p data-bbox="363 1088 826 1120">Conclusions and final remarks (15 min)</p>

Annex 3: Guidance for group work

Task 1: Roles, challenges, and opportunities for enhancing Public Health Collaboration for NCD Prevention

- Participants will be divided into 4 groups
- Each group will have a facilitator assigned by the National Public Health Institute
- Each group will assign a group reporter, who will be tasked to provide in writing the group work results the workshop reporter

Group work topics:

Group work 1: Collaboration between the key public health institutions, challenges and strategies to improve the effectiveness of NCDs prevention and community engagement

How can the Ministry of Health and key public health institutions collaborate more effectively to address NCDs risk factors? (15 min)

What are the main challenges faced by public health institutions in addressing NCDs risk factors at the local level? (15 min)

How can these challenges be overcome, and what strategies can be implemented to improve the effectiveness of NCDs prevention efforts?

What should be the role of public health institutions in community engagement for prevention of NCDs? (15 min)

Group work 2: The collaboration between the public health institutions and primary health care in addressing the NCDs risk factors – what can be improved?

How can the communication between the Public health centers and the PHC providers / Preventive teams in the health centers be strengthened in a sustainable manner?

What could be done at national and regional levels? (20 min)

Group work 3: Identification of priorities and next steps

Identify three key next steps/priorities for strengthening the coordination between the public health institutions in addressing NCDs risk factors (10 min)

Identify three key next steps for strengthening the role of the public health institutions in addressing NCDs risk factors, and specifically for:

- a. population-level interventions PHIs and PHCs
(both for inter-sectoral collaboration and community approaches)
- b. individual-level interventions
(in collaboration with PHC and preventive care units in the public health centers) (10 min)

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