World Health Organization

REGIONAL OFFICE FOR Europe

WHO EUROPEAN MEETING OF NATIONAL NCD DIRECTORS AND PROGRAMME MANAGERS

MEETING REPORT

Towards the third decade

Moscow, Russian Federation
8-9 June 2017

ABSTRACT

A meeting of national NCD Directors and Programme Managers in the European Region was held in Moscow on 8-9 June 2017 to review the challenges and opportunities of achieving the NCD targets in Europe as a tool in the implementation of the Sustainable Development Agenda for 2030. The meeting:

1. Examined the progress and status of NCD prevention and control in Europe.
2. Scanned the horizon for relevant innovations and opportunities to be more strategic and more effective.
3. Developed a European contribution to a global road map for the NCD targets from 2018 to 2030.

The meeting focused on a number of key areas, including the decline in mortality, the importance of masculinity and consideration of gender as an important risk factor, the excess mortality from cardiovascular disease, and the possibility of agreeing a more ambitious regional goal to reduce premature mortality by 45% by 2030. Taxation and tackling hypertension in health systems were identified as among the key policy responses. The meeting also explored more radical ways of dealing with commercial determinants and innovative approaches to using information for planning, interventions and surveillance.

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Background

The main causes of premature death and avoidable disability in the WHO European Region are known, as are effective interventions to prevent and control many of them. Two thirds of premature deaths in the Region are caused by four major NCDs (cardiovascular disease (CVD), diabetes, cancers and chronic respiratory disease) and by tackling major risk factors (such as tobacco and alcohol use, unhealthy diets, physical inactivity, hypertension, obesity and environmental factors), at least 80% of all heart disease, stroke and diabetes and 40% of cancer could be prevented. In Europe, some leading causes of years lived with disability (such as musculoskeletal disorders, mental disorders and dementia, injuries and oral disease) share many common risk factors and underlying determinants with the main NCDs.

During the United Nations High-level Meeting on Noncommunicable Diseases (NCDs) in 2018, Heads of State and Governments will take stock of their achievements in this area and progress towards targets agreed upon in the first United Nations General Assembly on NCDs in September 2011, and re-committed to in the second Assembly on NCDs in 2014.

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The meeting set out to:

1. Examine the progress and status of NCD prevention and control in Europe.
2. Scan the horizon for relevant innovations.
3. Develop a European contribution to a global road map for the NCD targets from 2018 to 2030.

The European status report was launched in order to review progress in the six years since the adoption of the Political Declaration of the High-level Meeting of the General Assembly on the prevention and control of NCDs[1] and the three years since the adoption of the Outcome document of the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of NCDs[2].

Representatives of 35 Member States participated, along with invited speakers, observers, representatives of the European Commission, non-governmental organizations and WHO, and a rapporteur.

[1] Resolution 66/2. Political declaration of the High-level Meeting of the General Assembly on the prevention and control of noncommunicable diseases. New York: United Nations General Assembly
; 2011 (A/66/2; http://www.un.org/en/ga/search/view_doc.asp?symbol= A/RES/66/2).

[2] Resolution 68/300. Outcome document of the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of non-communicable diseases. New York: United Nations General Assembly; 2014 (A/68/300;http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/68/300).

Welcome and opening

Introductions

On behalf of WHO in the Russian Federation, Dr Melita Vujnovic, Head of the WHO Country Office, thanked the Russian Federation for hosting the meeting and for its support in the field of NCD prevention, then set the scene for the introductory sessions. It is time to examine whether and how goals can be achieved and consider whether the targets should be more ambitious, as well as identifying barriers and potentially innovative solutions. This will be an important part of preparation for the global meeting on NCDs to be held in Montevideo, Uruguay, in October 2017.

Mr Dimitry Kostennikov, State Secretary, Deputy Minister of Health, Russian Federation, welcomed all participants to Moscow on behalf of the Ministry of Health.

The very high level of participation in this important meeting, to examine progress in the six years since the global targets on NCDs were agreed at the UN High Level Meeting in 2011, is very encouraging. The coming two years will present key opportunities to exchange information on our achievements and innovative approaches.

It is clear that countries will need to harmonise efforts to tackle the tremendous challenge of NCDs and to overcome lobbying from industrial interests. This will require a multisectoral approach and a variety of measures to ensure that healthier choices are the easier choices.

Two years ago, the Russian Federation and the WHO Regional Office for Europe developed a project to strengthen NCD prevention. This includes establishment of a geographically dispersed office on NCDs based in Moscow, which helps to unite Member States efforts and provide them with access to the best available knowledge and evidence base.

The government of the Russian Federation has accorded the highest priority to prevention of NCDs across the life-course in recent years and is now implementing a multisectoral programme on healthy lifestyles, including actions on tobacco-free environments, alcohol, healthy diet and physical activity. There is still much work to be done, but the contribution of this collaboration between WHO and the Russian Federation has been recognized by other countries in the eastern part of the European Region and a basis for constructive cooperation on the way forward has been established.

The Secretary of State wished all participants a successful meeting with fruitful exchange of knowledge to support efforts on prevention and control of NCDs.

Ms Natalia Sanina, member of the State Duma of the Russian Federation, added her words of welcome on behalf of the Committee on Health Protection. The Ministry of Health of the Russian Federation has maximised efforts to drive forward progress on NCD prevention. NCD prevalence presents challenges in all regions of the Russian Federation and the efforts of Regional Ministries are also important. All federal institutions, hospitals and clinics have been actively working together. It is encouraging to see WHO taking stock of the achievements over the past six years. The Committee on Health Protection and the State Duma remain committed to supporting legislative measures. She wished all participants a successful meeting.

On behalf of WHO, Dr Oleg Chestnov, Assistant Director-General, conveyed thanks to the Russian Federation for hosting the meeting and for its efforts on the health agenda and to all Member States for their participation. It is important to demonstrate to Ministries of Health that they are not working alone on the huge agenda of tackling NCDs. It is clear that health does not only belong to the health sector and input is required from other sectors. Multisectoral measures are essential and within the European Region there are emerging examples of such initiatives. The WHO Secretariat's role is to provide Member States with advice and with tools to facilitate action. The European Region has been a champion of the NCD agenda and is proving to be a locomotive on NCDs, so experience here in Europe will be shared with other regions.

At the United Nations General Assembly High Level Meeting on NCDs in September 2011, Heads of State delivered a clear mandate on prevention and control of NCDs. A first check on progress, at the High Level Meeting in 2014, acknowledged the progress realized in establishing a global architecture for tackling this challenge. The third High Level Meeting in September 2018 will be the next opportunity for Member States to check on progress in implementation of the mandate and decide whether to extend the mandate for the next five years.

It is through the efforts of NCD Directors and Programme Managers—and by mobilizing political leaders and other sectors—that progress on this mandate and towards the Sustainable Development Goals will be realized. WHO is keen to be a partner in this process, and to provide help at the country level wherever needed by providing guidelines and tools. On behalf of the Director General, the Director General Elect and the Regional Director, he wished all a very productive meeting.

Sir George Alleyne, Director Emeritus, Pan American Health Organization, addressed the meeting via a remote video connection. There are a number of reasons to be optimistic about the NCD agenda. First, the progress achieved in Europe demonstrates that it is possible, despite all the difficulties, to reduce premature mortality. Second, there has been a considerable increase in international interest in the issue of NCDs. Finally, there has been tremendous increase in the involvement of NGOs and civil society in this issue. Nonetheless, there are still many challenges. There remains a need for more finance, there are still difficulties in getting health systems to address these issues through a platform common to all NCDs, and further application of tobacco taxation is still needed. A focus on hypertension is also needed, and should take into account the technological advances on the measurement of blood pressure. Sir George expressed gratitude to all involved for the inspiring efforts on NCDs and looked forward to the outcome of the deliberations.

Dr Vujnovic summarised some of the key challenges ahead, such as health financing, addressing co-morbidity with conditions such as tuberculosis and the organisation of health systems.

The third decade: Where next for NCDs in Europe?

Dr Gauden Galea, WHO Regional Office for Europe, set out the context for the meeting discussions.

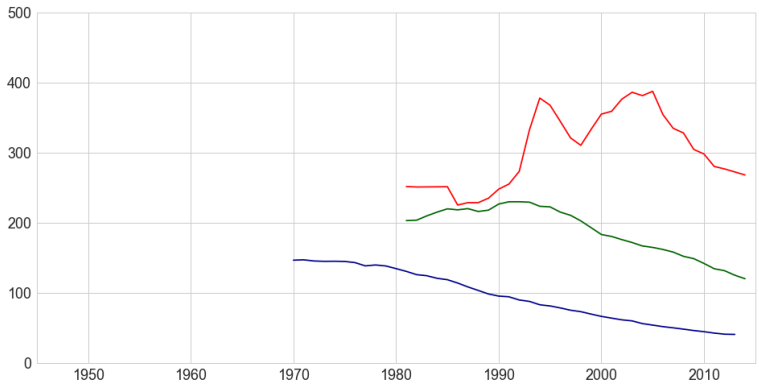
The World Health Assembly adopted the first NCD strategy in 2000 and, during that first decade of action, WHO focused on developing the technical expertise and tools. The next decade, which started with the Moscow meeting and the UNGA High Level Meeting in 2011, propelled NCDs high onto the global political agenda, culminating in integration into the Sustainable

Development Goals. Taking into account the reporting timetable, there are now only around 10 active years left to achieve the goals by 2030 and this third decade of action on NCDs will be critical.

The status reports prepared for this meeting[3] are surprising and full of paradoxes. While the results show considerable success, this is achieved through relatively little action. It is important to fully understand this by looking at the data in more depth.

Figure 1 Trends in premature cardiovascular deaths in males in CIS, EU13 and EU15 countries

Standardized mortality rate, circulatory diseases, 0-64 years, per 100,000 males, all EURO countries



Commonwealth Independent States (CIS); EU13 (after 2004); EU15 (before 2004)

Figure 1 shows the average of three country groupings—CIS, EU13 and EU14 countries—illustrating three different layers of NCD epidemiology and mortality in the Region. Every region and every sub-region, and practically every country, has declining premature mortality from NCDs. Progress, however, is at different levels and the decline is delayed in CIS and EU13 countries. More specifically, CIS countries are two generations behind, while EU13 countries are about one generation behind the EU15 in terms of progress on NCDs. There exists, therefore, the possibility of leapfrogging—those countries which have the NCD burdens that existed elsewhere in Europe in the 1980s, but which have access to the knowledge and evidence of today, may be able to rapidly catch up with the EU15 countries. In this way, application of today's lessons to past problems, which appeared almost intractable 30 or 40 years ago, could generate significant health gains for the future.

Premature mortality from NCDs is declining in both men and women in each sub-region. If things continue as they are, the target of a 33% reduction in mortality will be easily achieved by 2025 (five years before the 2030 SDG deadline). However, this hides a number of problem areas.

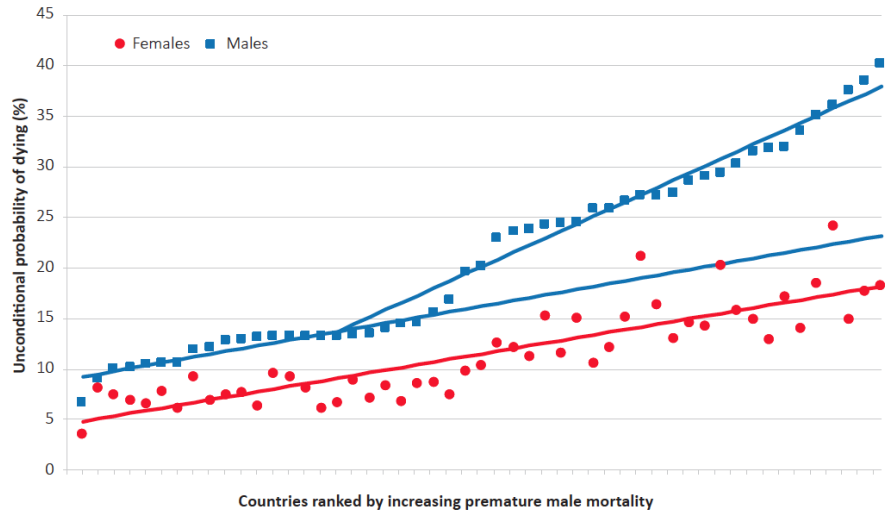
While a gender gap in mortality from NCDs has long been acknowledged, a closer examination of the data highlights significant excess avoidable male deaths in part of the region. Figure 2 shows premature NCD mortality (30-69 years) countries ranked from low to high mortality

[3] WHO Regional Office for Europe. *Towards a Europe free of avoidable noncommunicable diseases*. WHO: Copenhagen; 2017.; WHO Regional Office for Europe *Noncommunicable diseases progress monitoring—are we meeting the time-bound United Nations targets?* WHO: Copenhagen; 2017.; WHO Regional Office for Europe. *The WHO Global Monitoring Framework on noncommunicable diseases–Progress towards achieving the targets for the WHO European Region*. WHO: Copenhagen; 2017.

(which also corresponds roughly from west to east). This shows that in part of the region (left of the figure) there is a parallel, but higher, trend for men compared to women. On the right of the figure, however, the mortality of men suddenly increases—men in this part of the region die at a much higher rate. There are hundreds of thousands of excess, avoidable male deaths that occur beyond the biological differences between men and women. Rather than simply dismissing this as being due to higher prevalence of risky behaviours (smoking, alcohol), it is suggested that masculinity itself should be defined as a fifth risk factor. The social construction of maleness in many countries may result in a large proportion of population avoiding self-care, avoiding prevention or not accessing health services. At the same time, services may not be appropriately designed for this population. An extra focus on maleness as a modifiable risk factor is, therefore, suggested for the coming decade.

Figure 2 Premature NCD mortality among men and women in the countries of the European Region

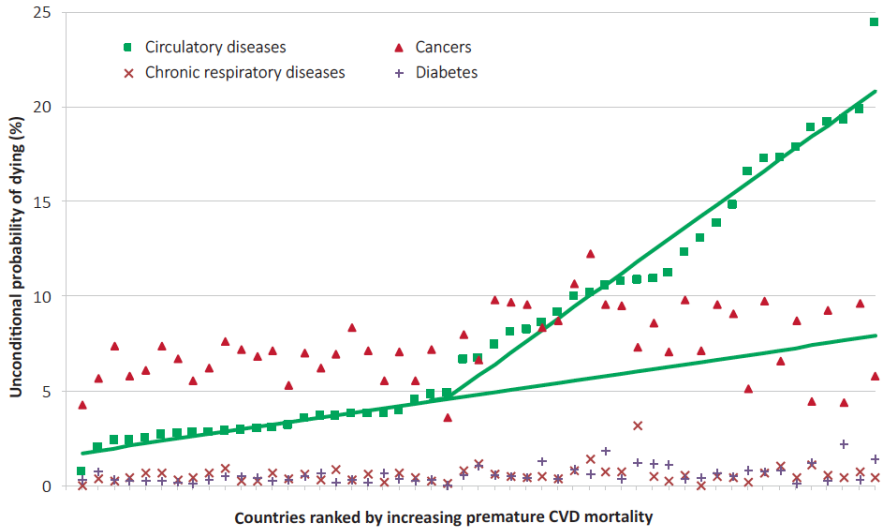
Unconditional probability of dying (30-69 years) from four major NCDs in the WHO European Region, latest available data.



A similar picture emerges looking at the risk of dying prematurely from each of the four major NCDs (Figure 3). Cancer mortality cuts across the Region in a straight line, although this hides a more complex picture—whereby, for example, countries with increasing mortality and those with falling mortality are at roughly the same level. Cardiovascular mortality, however, shows the same pattern as seen for men—a smooth rise for countries with low mortality, then a very rapid rise for the central and eastern countries of the Region. A major challenge, therefore, is to urgently tackle the large volume of excess cardiovascular deaths in this part of the Region.

Figure 3 Premature NCD mortality from the four major NCDs in the countries of the European Region

Unconditional probability of dying (30-69 years) from four major NCDs in the WHO European Region, latest available data.



Tobacco use is on a slow decline but is projected to miss the global target set for 2025. According to the country capacity survey, recently completed by all countries in the Region, there has been very little progress in increases in full taxation to reduce the affordability of tobacco. Despite many price increases, very few countries have reached the level where tax and price increases impact on the affordability of tobacco. Thus, the reduction in mortality is being realised despite under-use of tobacco taxation, suggesting that major gains could be made in the next decade by *full* use of tobacco taxation.

There also appears to be an encouraging long-term decline in hypertension, and there has been some improvement in the provision of drug therapy and counselling for persons at high risk. This decline has been achieved even though it is still only a minority of the European population that has access to counselling and services in relation to hypertension. This suggests there is potential for huge gains if efforts on hypertension were intensified, if salt intakes were significantly reduced and if more people had access to treatment. Such efforts could play a key role in eliminating excess cardiovascular deaths.

In relation to progress towards the nine voluntary global targets, the Region is on track to meet target 1 on reduction of premature mortality and target 6 on reduction or control of hypertension. However, these will be largely achieved on the basis of historical trends. Effective action with real potential to impact on the trends has only been seen relatively recently, and there is still much work to be done in very many areas.

Within the context of Health2020, the points highlighted—such as, men, CVD, risk factors, reducing mortality and premature mortality and promoting physical health—need to be considered as entry points for a broader, comprehensive approach to NCDs. This means, for example, bearing in mind that while women do not die as young as men from NCDs, they suffer from these conditions for longer. Similarly, while there is an opportunity to reduce excess cardiovascular deaths there is still much to be done through treatment, prevention and screening to avoid death and disability due to cancer. As well as tackling the key risk factors it is important to consider *all* socio-determinants, including masculinity and a gender-based approach. Tackling

disability as well as mortality needs to be an important element. Parity between physical and mental health is also important. The approach should, therefore, respect this full agenda while recognising the urgency of only 10 years to achieve our agreed targets.

A three-pronged strategy is, therefore, proposed for the Region:

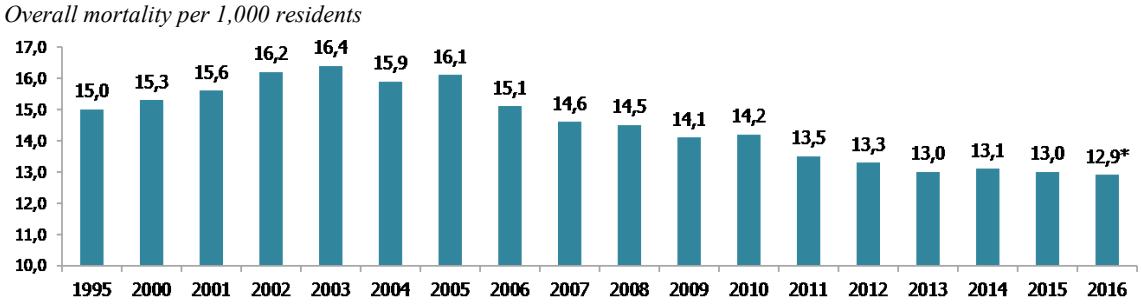
- Leapfrogging—Apply the best buys aggressively across all the population so that countries lagging behind can catch up rapidly
- Masculinity—Eliminate excess male deaths by incorporating masculinity as a fifth risk factor
- Cardiovascular burden—Eliminate excess CVD deaths using innovative approaches.

Given that the Region is on track to meet the target for a 33% reduction in premature mortality, participants were asked to consider whether a more ambitious target for a 45% reduction in premature NCD mortality by 2030 would be appropriate. Member States were invited to give feedback on this proposal.

Accelerating NCD targets in Europe: a country perspective from the Russian Federation

Professor Sergei Boystov, Russian Cardiology Research and Production Complex, provided an overview of Russian policies and strategies to control NCDs.

Figure 4 Mortality in the Russian Federation, 1995 - 2016



Mortality peaked in 2003-5 and there has now been an 18% reduction in mortality and life expectancy at birth has significantly increased, although there remains a gap of 11 years between women and men. Despite the reduced mortality, rates are still 199% higher than in EU15 Member States and 28% higher than the EU15 countries. In addition, over the last four years there has been a slowing down of the mortality decline.

Mortality reduction has been possible due to three elements:

- Capacity to lead a healthy lifestyle due to social stabilization and economic stability
- Better access to and quality of healthcare
- Population-level control of NCDs.

This last element has seen reduction of smoking prevalence in men (40-60 years) by 30%, a 20% drop in hypertension in women (40-60%) and a 35% decline in vodka sales. These have been achieved by implementation of the federal programme on hypertension, new standards on

primary care and development of health centres, raising awareness of healthy lifestyles through mass media, anti-tobacco laws, increase in excise duty on alcohol and provision of regular medical check-ups and risk factor screening.

The slow down in the decline in mortality in the last few years can be attributed to higher prevalence of hypertension in men (a 24% increase between 2003 and 2013), higher prevalence of diabetes mellitus (a doubling over the same period) and higher prevalence of obesity in men (tripled from 9% to 27% between 1993 and 2013). Other factors that have the potential to hinder population mortality gains between now and 2030-2040 include higher prevalence of smoking in women (60% increase between 2003 and 2013), the fact that up to 30% of schoolchildren smoke and greater prevalence of childhood overweight and obesity (increased from 7% to 14% from the 1990s to 2014).

The differences in cardiovascular risk between men and women are striking. Around 64% of men aged 40-64 in Russia have a high cardiovascular risk (according to the SCORE chart) or suffer from CVD related to atherosclerosis. For women, the figure is 35%.

The Russian Federation has developed a *Strategy to shape a healthy lifestyle, prevention and control of NCDs in Russia.* This aligns very closely with the WHO European Region action plan on prevention and control of NCDs, based on the same principles and the same targets (although the Russian ones take 2015 as the baseline and 20 additional targets are allocated). A number of barriers have been identified, including resistance to healthy diet measures, for example, from the food industry and from consumers. To date, no agreement has been reached between the food industry, consumers and food authorities on food reformulation and composition, but the community has now become engaged on this issue and there is optimism for the future.

There are four main elements to the strategy:

- Reduction in population risk (Improving health awareness and encouraging the population to lead a healthy lifestyle; Creating conditions for healthy lifestyle)
- Reduction in individual risk (Preventive medical examinations, 850 health centres, health resorts)
- Secondary prevention in primary care (Dispensary examination of therapeutic points)
- Secondary prevention in hospitals (Prevention of complications and adjustment of risk factors)

The strategy incorporates specific targets in each of these areas. Many are aligned with WHO targets, but additional targets have been incorporated on, for example, vaccination and safe environments.

It is estimated that, if the successive efforts to realistically reduce hypertension, high cholesterol and smoking prevalence are taken, then cardiovascular risk would reduce by 17% in men and 13% in women. If current trends continue, it will be possible to reduce cardiovascular risk by a total of 10%, so efforts on risk factor reduction, environmental factors and healthcare will need to be intensified if the targets are to be met.

Taxation: A win-win for public health and domestic resource mobilization

Dr Aida Ramic Catak, Federal Institute for Public Health, Bosnia and Herzegovia, provided an introduction to the plenary session on taxation, focusing on tobacco and alcohol. There is strong evidence that through taxation can decrease substance abuse and raise revenue at the same time. Article 6 of the Framework Convention on Tobacco Control (FCTC) encourages use of price and tax measures to reduce demand for tobacco. Significant differences exist, however, between Member States in terms of prices and taxation levels, and there is much more to be done to fully realise the potential of these measures. There is a strong case for sharing examples of good practice and exploring greater involvement of regional economic cooperation agencies, in order to identify potential ways forward for the future.

Why tobacco taxation matters

Dr Patricio Marquez, World Bank Group, United States of America, presented an overview of global progress on tobacco taxation. He began by congratulating the host country on the remarkable progress achieved on tobacco control and changing attitudes to tobacco.

Since 1999 the World Bank has had a very unambiguous position on tobacco, and does not finance or support tobacco production, processing or marketing in any way. The World Bank sees tobacco as a major development challenge and tobacco control is, therefore, aligned with the Bank's aims of eradicating extreme poverty and increasing shared prosperity.

It is important to recognize that manipulation and deception in the marketplace influence decisions to use tobacco. Cigarette and smokeless tobacco companies spend billions of dollars each year to market their products, usually targeting young people, women and minority communities. Companies use advertising to convey certain stories of glamour and 'feel good, and exploit human psychological weaknesses to get people addicted. There is, therefore, strong justification for state intervention in the market place.

Over the last five decades the scientific evidence has accumulated and it is now indisputable that smoking cigarettes is addictive and it kills. As the world's leading cause of preventable morbidity and mortality, tobacco use is also a development challenge. Most smokers live in low- and middle-income countries and there are major socioeconomic differences. Evidence from the Global Youth Tobacco survey in 61 countries found that 50% of young smokers aged 15-19 would like to stop smoking but are unable *(1)*. The economic losses—both from the direct costs of medical care and indirect costs from productivity losses—undermine human capital development and are estimated to total US$ 1.4 trillion globally each year.

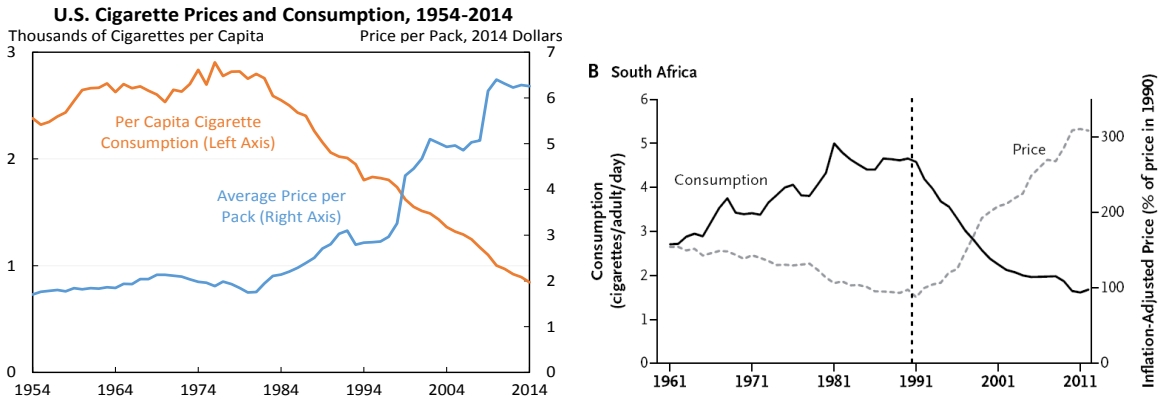
There is a strong economic rationale for government intervention in the market place in order to protect consumers and there is clear evidence that such measures work. The core measures to influence demand and supply are set out clearly in articles 6 to 14 of the FCTC.

Taxing tobacco is a win-win for public health and domestic resources mobilization. This is consistent with the Addis Ababa Action Agenda on financing for development, which was adopted in 2015. This is not a radical new idea—the father of modern economics Adam Smith stated that sugar, rum and tobacco are '*extremely proper subjects of taxation*' in 1776. The

International Monetary Fund echoes the World Bank position; tobacco taxation can offer a win-win of higher revenue and positive health outcomes.

Cigarette taxes play a critical role in determining prices and where prices are increased, consumption is reduced—as observed in country after country (Figure 5)—and health benefits are generated.

Figure 5 Impact of cigarette price increases on consumption in the United States and South Africa



Sources: Orzechowski and Walker (2015); Bureau of Labor Statistics; CEA calculations;

One of the common objections to higher tobacco taxes is that governments will lose taxation revenue. Experience shows, however, that taxes can mobilize large amounts of funding to consolidate public budgets. In the Philippines, for example, revenues from the Sin Tax doubled as a share of GDP between 2009 and 2015, mobilizing close to 4 billion USD in four years. Meanwhile, there are an estimated 4 million fewer smokers in the country and at least 70,000 deaths have been averted since 2013. In addition, 80% of the revenue raised has been allocated to expanding universal health coverage and 45 million more Filipinos have access to care because the additional resources are helping to fund their premiums. Similarly, in Ukraine increases in excise duty on cigarettes led to tobacco excise revenue rises, equivalent to 2% GDP.

Another objection often cited to tobacco tax is that such taxes are regressive and that they hurt the poor. In fact, tobacco taxes are strongly progressive when the benefits of reduced mortality and morbidity are counted, since these benefits are accrued to low-income groups.

A third objection is that higher tobacco taxes encourage illicit trade. While high taxes may create some incentive, other factors such as weak tax administration systems, poor enforcement and corruption, have a much bigger impact. There is evidence that strong tax administration works in countries where high tobacco taxes are the norm, such as the UK and Chile. The IMF has proposed clear measures for tackling tax administration issues. Illicit trade can be controlled by strengthening customs systems and improving tax administration and governance.

In conclusion, therefore, tobacco taxation is a win-win policy measure that generates (a) public health benefits by reducing consumption among smokers and preventing addiction among young people, and (b) additional tax revenue to fund priority investments and programmes that benefit all. To achieve this over time, effective strategies involve combining big initial tax increases with recurrent tax hikes over time, to adjust for inflation and rising per capita growth. Strong leadership and broader alliances are essential to drive forward this agenda.

Alcohol taxation policy: Potential to reduce alcohol consumption and prevent drinking initiation

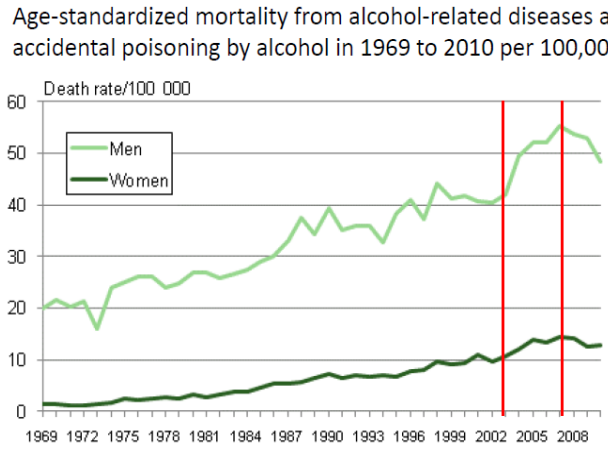
Dr Jürgen Rehm, Centre for Addiction and Mental Health, Toronto, Canada, provided an overview of the potential of taxation policy in relation to alcohol.

There is a clear economic rationale for taxation on alcohol—when government incurs costs because of a legal market activity (negative externalities) the government has the right to recover some of that money through taxation. This is known as a Pigouvian tax. The social cost of alcohol in Europe in 2010 is estimated at around 156 billion euros, equivalent to 1.3% of GDP. Thus, governments have every right to recover some of that money.

A recent review of alcohol initiatives on alcohol pricing and taxation in 110 countries found that alcohol taxes are by far the most commonly studied and there is very strong evidence of effectiveness (more than 98% produced positive results) *(2)*.

In one clear example, Finland lowered alcohol taxation in the early 2000s because of fears of cross-border trade. The subsequent increase in alcohol-related deaths was highest in lower income groups. When the government then raised taxes again the death rate fell in both men and women (Figure 6).

Figure 6 Alcohol-related mortality and alcohol taxation changes in Finland



The first red line shows when alcohol taxes were reduced and the second line shows when taxes were increased again.

Experience also shows that, in order to be effective, taxation needs to increase in line with inflation. If this does not happen, death rates will continue to rise.

In general, evidence from a key systematic review suggests that:

- People increase their drinking when prices are lowered, and decrease their consumption when prices rise.
- Adolescents and problem drinkers are no exception to this rule.
- Increased alcoholic taxes and prices are related to reductions in alcohol-related problems, including crime, traffic accidents and mortality rates
- Alcohol taxes are thus an attractive instrument of alcohol policy because they can be used both to generate direct revenue and to reduce alcohol-related harm.

- The most important downside to raising alcohol taxes is smuggling and illegal in-country alcohol production *(2)*.

Alcohol taxation was recognised as a 'best buy' at the first Moscow conference on NCDs in 2011 and has again been endorsed by the World Health Assembly in 2017 as one of the new 'best buys' which is feasible, low-cost and cost-effective. It can also help play an important role in reducing health inequalities. In addition, alcohol taxation can help delay or avoid initiation in drinking among young people. Age of initiation has been linked to serious outcomes in adult life and this is particularly relevant for the European Region, where early drinking is still seen as somewhat inevitable. Experience from countries like Thailand—which had traditionally low rates of alcohol use but faced rapid changes—has shown that taxing types of drinks very popular with young people can slow the rate of conversion from abstainers to drinkers.

A common argument against alcohol taxation is that unrecorded consumption will increase as taxes are increased. This is no longer an issue for most EU countries. For countries in eastern Europe, where this has been more of a problem, experience has shown that while unrecorded consumption may increase there is still an overall drop in consumption.

In conclusion, taxation is on of the most powerful policy tools to reduce the burden of alcohol consumption, provided it keeps affordability at least constant. Research has shown that it also has the potential to impact on age of initiation of drinking. Within the current taxation structure and discussed increases, the effect of increases in taxation on unrecorded consumption will be negligible for high-income countries.

Tobacco taxation in Turkey: An overview of policy measures and results

Dr Volkan Çetinkaya, World Bank Group, United States, presented the specific example of Turkey's experience with tobacco taxation.

Turkey's fight against tobacco faced a particular challenge because the tobacco industry is very important economically in the country. There are around 56,000 farmers are growing tobacco and annual tax revenue is estimated at 9.5 billion USD (8% of all tax revenue). Turkey is also one of the biggest consumers of tobacco, representing the seventh biggest market globally. The state monopoly has now been removed and all the usual big tobacco players are present.

The burden of tobacco consumption in the country is also heavy, with more than 100,000 people dying every year from tobacco-related diseases (a quarter of all deaths). Around a quarter of the population smokes, spending 12 billion USD every year on tobacco products—equivalent to four times the annual budget of the Ministry of Health.

The country's fight against tobacco started in 1996 with the first tobacco control law, followed by ratification of the FCTC in 2004 (which has now been implemented to the highest degree), and culminating in the implementation of plain packaging measures in January 2017. These and other milestones have been achieved through commitment and leadership from the Ministry of Health, with involvement of other sectors in a multisectoral government approach.

Taxation has played an important role and Turkey has one of the highest tax rates in eastern Europe and central Asia, with taxes accounting for 83% of the price. The country has lowered per capita consumption by 24% (2003-2014) while increasing tobacco tax revenue by 281% (around 60% in real terms). Since 2014, however, consumption has started to gradually increase

again. A number of possible explanations were proposed for this increase, including the influx of Syrian refugees, a decrease in availability of smuggled cigarettes due to the war, or higher levels of stress in the population. However, closer examination of the data found that the price increases due to taxation had fallen below inflation, so the relative prices had decreased, and affordability increased as people became wealthier. In addition, prices varied considerably between brands and despite the high tobacco taxes there are some cheaper cigarette alternatives available.

Tackling the issue of illicit trade is another component of the fight against tobacco. Illicit trade is multidimensional, involves multiple players and has various different causes, many of which are related to governance. In response to the scale of the problem, and to intelligence suggesting that illicit trade was financing terrorism, the Ministries of Health, Interior Affairs, Customs and Finance worked together to combat the illicit tobacco trade. In 2007 a digital tax-stamp system was implemented—using invisible ink and featuring a unique code with product data for each cigarette pack—and initiation of an online monitoring and tracking system, as well as measures to modernize public institutions and improve governance. As a result the number of smuggled packs confiscated has increased dramatically—in 2015, 143.4 million packs were seized, representing a loss in tax revenue of 265 million USD.

In conclusion, taxation is the most cost effective way to fight against tobacco. If the taxes do not lead to higher tobacco prices, however, the impact on consumption is significantly diminished. Illicit tobacco trade is an international problem requiring a global response, but can also be controlled by strengthening the capacity of tax administration and by improving enforcement.

Tobacco taxation in the European Union: An overview and lessons learned

Ms Annerie Bouw, DG Taxation and Customs Union, European Commission, provided an overview of tobacco tax harmonization within the EU and highlighted some lessons learned.

Harmonization of tobacco excise duties is based on the need to ensure proper functioning of the internal market, avoid distortion of competition, protect EU's citizens' health and for Member States to generate stable revenue.

Member States are free to set different prices and, in 2017, the weighted average price per pack for cigarettes still varies considerably between Member States. This also reflects differences in geographical location and income levels. There is a greater degree of harmonization on the tax burden on cigarettes as a percentage of weighted average price, meaning that the objective of avoiding distortion of competition has been met.

The aim of protecting citizens' health has also been achieved because consumption of cigarettes has decreased considerably between 2002 and 2015 (

Figure 7). At the same time, revenues from cigarette excise duties have remained stable (Figure 8). The revenue from excise duties goes entirely to Member States for national budgets. There has been relatively little earmarking of such revenue for specific health budgets. In France, however, a tax on tobacco industry turnover contributes to funding health insurance, while in Belgium and Romania some of the revenue from excise duty is allocated, respectively, to social security and health.

Figure 7 Consumption of cigarettes in the European Union 2002 – 2015

Releases of cigarettes for consumption (in 1000 pieces)

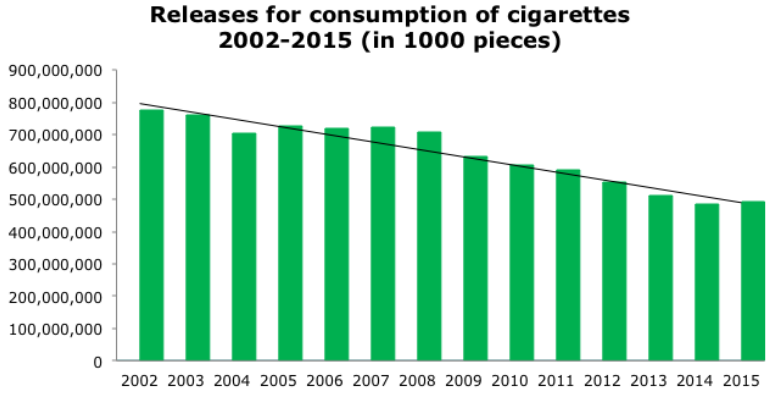
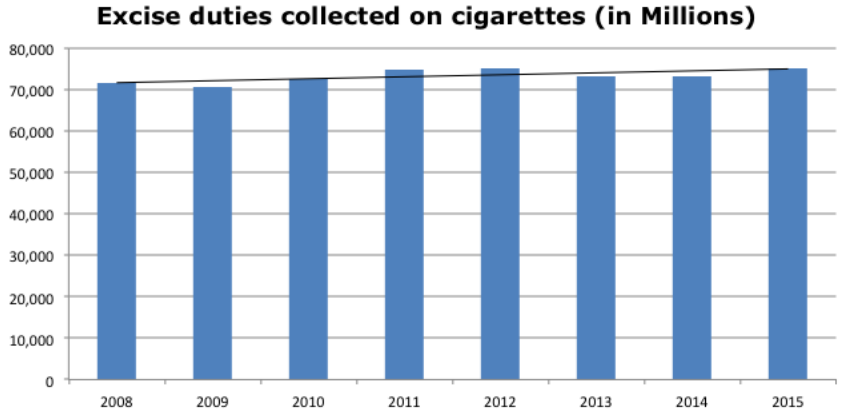


Figure 8 Total revenue from excise duties on cigarettes, European Union, 2008 - 2015



The experience of new Member States, such as Romania and Croatia, also confirms that it is possible to raise excise duty rates, achieve stable revenue and reduce cigarette consumption.

The mechanism for harmonization of excise duties has involved a harmonization of structures and an approximation of rates by setting minimum rates. The structure consists of an *ad valorem* component, related to price, and a specific component, related to weight irrespective of price. Every excise duty in the European Union has to consist of these two components. A minimum excise duty for cigarettes has also applied since January 2014 (with a transitional period until 31.12.17 for nine Member States). This minimum rate has to be at least 60% of the weighted average price of cigarettes and at least 90 euros per 1,000 cigarettes. Member States that levy at least 115 euros per 1,000 cigarettes do not need to comply with the 60% criterion. Rate increases were envisaged from the outset, when the rates were agreed in 2010.

A couple of important lessons have been learned through this harmonization process. One lesson is the importance of making the process as future-proof as possible. Due to the requirement for unanimous EU decision-making on tobacco tax policy, efforts were made to anticipate future developments from the outset (e.g., setting future rate changes, building in transitional periods) in order to avoid having to seek a new decision from the Council. A second lesson is that success

is highly dependent on effective enforcement. The Commission, therefore, has developed training and tracking tools to help Member States to combat illicit trade.

Lessons from countries

Ms Kristina Mauer-Stender, WHO Regional Office for Europe, facilitated a discussion where some countries shared their experience on tobacco or alcohol taxation. Several European Region countries are global leaders in this field, with some of the highest prices of tobacco and alcohol prices in the world, and other Member States have demonstrated remarkable progress in recent years. It is important to learn from one another in this complex field, which requires multisectoral collaboration and faces heavy opposition from industry.

Iceland's experience with alcohol control

Iceland has had continuous alcohol taxation for nearly 150 years, one contributory factor to the country today having one of the lowest levels of alcohol consumption in young people and adults in Europe. The purpose of the alcohol taxation has shifted in recent years from a primary focus on harm reduction towards more emphasis on state budget revenue, with allocation of 1% of alcohol taxation revenue to the state Public Health fund. The current form of alcohol taxation was first introduced in 1995.

Following the economic recession in 2008, the government increased the taxation on alcohol repeatedly and at the same time public purchasing power (PPP) dropped considerably. Alcohol consumption in both adults and youth dropped considerably, with no evidence of an increase in smuggling or home brewing.

In 1997, concern about substance abuse among Icelandic youth prompted an inter-sectoral collaboration involving parent groups, schools, researchers, politicians, media, sports organizations and corporations. This collaboration facilitated a comprehensive response, which included continuous taxation of alcohol and the state monopoly on sale of alcohol, introduction of limits on youth outdoor time and parent patrols to follow up on these limits. A greater emphasis was put on spending time with family and taking part in constructive, extracurricular activities. The proportion of 15 years old adolescents using alcohol in a harmful way then decreased from 42% in 1997 to 5% in 2016.

Taxation on alcohol in the Russian Federation

Since the consumption of spirits contributes much more to alcohol-related deaths in the Russian Federation than consumption of all other groups of alcoholic beverages, it is especially important to reduce the price affordability of strong drinks, such as vodka. The situation in Russia is complicated by a high proportion of unregistered consumption of strong alcohol.

In 2006, excise duty was introduced on alcohol-containing liquids, the same as for spirits. As a result of these and other measures in subsequent years, there has been a collapse in alcohol-related mortality. In 2006 alone, the number of deaths from alcohol poisoning decreased by 8,000 and the number of total deaths decreased by 137,000.

Civil society and religious organizations advocated raising excise taxes further. In 2009, therefore, a policy on reducing alcohol abuse for the period to 2020 was adopted. This included the application of price and tax measures to reduce the availability of alcohol products. Excise duties on alcohol products were significantly increased between 2011 and 2017, with an increase

of more than 50% in real terms in taxes on strong alcohol production. This was accompanied by a drop in overall and alcohol-related mortality and incidence of alcoholism. Introduction of a minimum price for alcoholic products led to a decrease in the price affordability for consumers, even for products not subject to excise duty.

Introduction of a unified automated information system to track alcohol and alcohol-containing products throughout the manufacture, wholesale and retail chain has led to a 25% increase in registered sales of strong alcohol products, an increase in revenue from excise taxes to 165 billion in 2016, and a 12% decrease in deaths from alcohol poisoning.

Tobacco taxation in Armenia

Armenia is at the beginning of the road on tobacco control. First attempts to regulate smoking started in the early 2000s, but the burden continues to increase with, for example, a five per cent increase in adult smoking in the last four years. The government, therefore, has developed a new strategy, under the leadership of the Minister of Health, and a significant increase in prices and a ban on smoking in all public places are envisaged.

The process is unlikely to be easy, however, because there is a strong tobacco industry in Armenia. Nonetheless, discussions have started and there is strong political will to move forward and reduce prevalence of smoking. Support from WHO and other Member States may be needed to help reinforce these activities.

Tobacco policy in Ireland

The health sector in Ireland has learned that public health arguments need to be accompanied by very strong economic arguments to persuade Ministries of Finance on fiscal matters. It is important to spell out that there are market failures in relation to tobacco and alcohol, which result in long terms costs to individuals and societies. These issues should be tackled explicitly, providing counter arguments to industry lobbying about the potential impact on jobs and the economy. Economic arguments are, therefore, critical for dialogue with other sectors. Engagement of the trade union movement can also be important for helping to respond to industry arguments.

Tobacco control in Georgia

Georgia reported that a new tobacco control law was signed in early June and will come into force in January 2018. This includes measures to introduce plain packaging, making Georgia one of eight global countries leading the way on this issue. This has been made possible by support from the WHO Regional Office for Europe. In recognition of this support, Dr Gauden Galea was presented with an award on behalf of the health authorities in Georgia.

Hypertension: Can we do better?

Dr John Devlin, Department of Health, Ireland, introduced the second plenary session on hypertension. It is an opportunity to consider the progress towards the targets and time-bound commitments and to consider how to overcome barriers to a comprehensive approach to prevention and control of hypertension. In addition, it is timely to consider the contribution that hypertension control could make to accelerated efforts to reduce premature mortality.

A life-course strategy to address the burden of raised blood pressure on current and future generations

Professor Michael Olsen, University of Southern Denmark, presented an overview of the findings and work of the Lancet Commission on Hypertension, which he chairs.

The working hypothesis of the Lancet Commission was that in order to beat hypertension it is necessary to reduce blood pressure in the population, improve awareness, get blood pressure measured by training more health workers, make treatment available with low cost high quality medications and ensure that appropriate evaluation and treatment decisions are taken.

A life-course approach, which seeks to close the gap between an ideal life-course and the average life-course, suggests that early intervention will lead to greater gains over time. This perspective is necessary because the true impact of interventions may not be apparent in the short time period that normally applies to randomised controlled trials (RCTs). In most individuals treatment duration far exceeds this time period and information about the accrual of benefits and potential harms over the life-course is lacking.

The Lancet Commission identified 10 key actions, and these closely resemble previous recommendations by WHO and the US CDC. These can be grouped together and summarized in two packages:

- Prevention-related technical package:
    - Improved public understanding of unhealthy and healthy lifestyles as well as elevated blood pressure and its consequences
    - Policy and environmental strategies to promote health and support healthy behaviours
    - Improved access to effective health care delivery systems
- Treatment-related technical package
    - Standard protocols for investigation, treatment and monitoring
    - Team-based care, task sharing and workforce development
    - Access to affordable medications, technology and health care
    - Surveillance, patient registries and information systems

The Lancet Commission Hypertension Group is now participating in a multisectoral strategy to advance this agenda. This includes raising awareness through engagement in May Measurement Month, launching a website (through the International Society of Hypertension), producing a pamphlet and starting collaborative projects. It also includes facilitating research on treatment in low resource settings, including through literature reviews, electronic health tools and projects in India and Nepal.

Salt reduction strategies: How do we make further progress?

On behalf of the European Salt Action Network (ESAN), Dr João Breda, WHO Regional Office for Europe, reported on the progress made by this Network and effective strategies for salt reduction.

The aim of the network is for countries to share experience with salt reduction efforts, provide background information and material, and act as a resource for technical expertise. It has a number of specific goals:

- promote the identification and **sharing** of national policies on salt reduction and the types of action undertaken;
- describe monitoring and evaluation strategies of salt reduction initiatives;
- discuss the public health and cost benefits of salt reduction strategies in different countries;
- develop good practice in the area of policy development, implementation, monitoring and evaluation;
- promote the development of science and food technology in the relevant areas;
- explore the links between salt reduction policies and inequalities.

The Network, currently chaired by Switzerland, has been working together for more than 10 years and 25 countries in the Region have participated in the annual meetings.

The drivers of salt consumption and many and varied, but the very complexity of the situation means that are also many effective approaches to salt reduction. There is also huge potential for different interventions to have a combined or synergistic effect. There are three key pillars for effective salt reduction:

- Consumer awareness and education
    - Campaigns—simple messages, targeting most vulnerable groups
    - Mediators—health care professionals and other experts
    - Nutrition literacy—how to read and interpret nutrition labels

- Product Reformulation
    - In coordination with food industry
    - Reduction of salt concentration in processed foods, involving identification of the main contributors (e.g., bread, cheese, processed meats) and developing category target values
    - Communal catering—identification of critical points for sodium/salt entry, salt optimized recipes, regular staff training

- Environmental changes
    - Making healthy food choices easy and affordable for everyone
    - Clear and comprehensive labelling, e.g. with logos

Experience from Network members shows that progress is possible. Strong collaboration in England, for example, led to significant decreases in both salt intake and average blood pressure between 2003 and 2011. Experience from countries such as Ireland also shows that salt reduction is possible in some of the most challenging food categories, such as processed meats.

Possible reasons why the European Region is not making *more* progress could include some technical barriers and the fact that the voluntary approach adopted in most countries can take time and may have its limitations. In addition, negative media coverage about the salt message may have lead to consumer uncertainty about the importance of salt reduction and continued advocacy and consumer awareness raising is needed to counteract these messages.

Switzerland

Ms Monika Ruegg, Federal Office of Public Health, Switzerland, gave a brief overview of the Swiss salt strategy, in place since 2008. The five pillars of the strategy are: data and research; public awareness; product reformulation; national and international cooperation; and monitoring and evaluation.

Measures taken as part of the strategy include:

- Forging a partnership with industry that sets voluntary, but binding, commitments to reformulate food products
- Promoting innovation and launching research studies to underpin the technical aspects of salt reduction and informing
- Informing and involving the public by a variety of means.

Initial successes include, for example, a reduction of more than 16% in the salt content of commercially-baked bread and a 10% reduction in the salt content of Swiss ready meals. Nonetheless, there will be challenges ahead—such as the marked differences in salt intakes between Swiss regions—and there is still much work to be done.

Improving blood pressure control: health system considerations including access to medicines

Dr Hans Kluge, WHO Regional Office for Europe, presented a health systems perspective on improving blood pressure control, and the outcomes of a collaboration between the health systems and NCDs divisions within WHO.

Country assessments have identified systemic barriers to better hypertension detection and control in the Region. Although primary health care has gone through tremendous changes in the past 20 years, many health systems are still not adequately structured for optimal NCD prevention and control. There are a number of push factors, which turn people away from seeking care at the primary health care level. These can include narrowly defined roles for health professions, protocols that require diagnosis and prescriptions to be confirmed by specialists, or lack of capacity in primary care. At the same time, people may not perceive that their conditions can be resolved through primary care and/or the way care is organised may be inconvenient for service users. There may also be pull factors, which draw people to specialist care and hospitals. These might be to do with purchasing mechanisms, informal payments or large hospital capacity, as well as easier access to medicines, laboratories and diagnostics. Cultural factors and expectations can also play a role. These factors are reinforced by financial incentives, which incentivise doing less in primary care and doing more at specialist and inpatient levels.

There are a number of key messages to help push forward progress on hypertension:

- **Outcome driven intersectoral governance**: These need to be reinforced at different levels of government. Since the financial crisis, there is evidence of more dialogue between health and financial ministries and recognition of the need to invest in health and health systems for better outcomes and also as an economic driver. It is important to adapt health arguments to the timeframes that are relevant for Ministries of Finance.
- **Proactive people-centred multi-profile integrated primary care**: Rather than focusing on particular levels of the health system or on specific professionals, the focus needs to

be on joined-up or integrated care which provides an extensive basket of services, adapted to the local risk profile and involving a variety of health professionals.

- **Incentives aligned with the service delivery vision:** There is a need to move away from the incentives that typically reinforce specialist-driven, hospital-based care and to move towards systems of mixed payments in primary health care (not only by capitation), total capitation and innovations such as bundled payments.
- **Expanding medicines coverage and ensuring quality:** Comprehensive pharmaceutical policies are needed, which includes flat-rate co-payments, exemptions to protect vulnerable groups and payment caps to protect people living with long-term conditions.

Finally, health systems absolutely have to be people-centred, adapting to the specific needs of the individual. This will be key to improving adherence and treatment and control.

Prevention of heart attack and stroke: the role of non-state actors

Dr Francesca Romana Pezzella, European Stroke Association, described the role of this organisation which aims to improve stroke care in the European Region. Membership includes more than 8,000 associate health professionals and associated NGOs.

As a major risk factor for stroke, hypertension is obviously very high on the European Stroke Association's agenda. It is clearly important for primary prevention, but also for treatment and control along the continuum of care.

The Association's work includes education and awareness raising, which is often dependent on alliances with NGOs, such as the Stroke Alliance for Europe. Another element of the Association's work is encouraging and supporting research into different topics, such as identification of the optimal blood pressure for stroke patients in the acute sector. The Association looks forward to future collaboration with WHO and Member States to help avoid stroke and improve quality of life for people after stroke throughout Europe.

Ms Marleen Kestens, European Heart Network (EHN), gave a brief overview of the role of this Brussels-based network of alliances of heart foundations and like-minded organisations throughout the WHO European Region.

The main focus of EHN's work is advocacy. The Network has made a strong plea to move away from self-regulatory or co-regulatory approaches on a small number of important areas. It calls on the European Commission to develop nutrient profiles, which would be very helpful for steering people towards healthier choices and for setting a framework for regulating marketing to children. Another important issue is for front-of-pack nutrition labelling, where a more unified system at the European level would be preferable.

EHN issues publications, such as the European Cardiovascular Statistics (which include data on prevalence, determinants and costs), a forthcoming paper on food and drink policies for promoting cardiovascular health to be published in September, and a paper on salt reduction.[4]

Some EHN member organisations are also active in the area of hypertension, through, for example, general awareness campaigns, screening campaigns, cooperation with government on

[4] See www.ehnheart.org

detection and management of hypertension, implementing a patient-centred approach and helping to translate medical messages into lay terms.

Success stories in prevention of raised blood pressure

Ms Ingrid Keller, DG Santé, European Commission, gave an overview of the EU response to NCDs, within the overall context of the UN process.

DG Santé is committed to supporting countries to reach the nine voluntary global NCD targets and the Sustainable Development Goals. To this end, a framework has been set up, whereby the Commission works with Member States through a Steering Group on Promotion and Prevention. This group is supporting the implementation of policies, will coordinate the sector-specific expert groups and support work on multisectoral collaboration. This Steering Group will be complemented by a Resource Centre, an IT platform that will disseminate information on examples of best practice and function as a one-stop shop for information about possible funding for health work (e.g., the Health Programme, the Structural Fund, the Innovation Fund). In addition, there is now the Joint Action CHRODIS+, involving 18 Member States plus two non-EU Member States. Following on from the CHRODIS Joint Action, which developed a lot of guidelines and models, the focus now will be on implementation. Furthermore, the Commission will be developing funding to finance the transfer of best practices between countries by various different mechanisms.

One of the key achievements of the first CHRODIS project is the online CHRODIS Platform for knowledge exchange where decision-makers, caregivers, patients and researchers across Europe can find and share the best knowledge on chronic diseases. This includes several projects on hypertension, easily found by searching the database.

Some common features from the best practices highlighted on CHRODIS can be identified. These include, for example, initiatives that have a strong base, are linked to policy, involve a multidisciplinary approach, have well-qualified and committed staff and cover physical and mental health. In addition, best practice initiatives often address isolation and are free of charge, flexible, sustainable, integrated into the health system and community-based.

Discussion
It was pointed out that it is increasingly important to be aware of the fiscal realities in countries and cost-effectiveness is, therefore, extremely important. Population-based prevention policies provide entry points for cost-effective approaches.

Lessons from countries

Dr Jill Farrington, WHO Regional Office for Europe, facilitated a discussion on Member State experience with efforts to prevent and control hypertension. It is clear that a great has been achieved in this area, but that to make the necessary progress there needs to be more action on both treatment and prevention, including aggressive application of the ‘best buys’. This needs to involve working with clinicians, patients, health systems and policy.

Salt reduction in Croatia

Croatia has been working on a salt reduction strategy since 2007. This started with a mapping of sodium intakes in 2008, when average intakes were estimated to be 11.3 g per day of salt. Levels of salt in bread and other baked goods were found to range from 2% to 3.7%.

Following negotiations between the food industry and the government, the main brand of mineral water reduced the sodium content in 2010. Then, in 2014, the Croatian Food Agency issued a scientific opinion on the impact of reduced salt intake in the diet and the Ministry of Health adopted a strategy for salt reduction between 2015 and 2019. The strategy aims to gradually reduce average salt intake from 11.3 to 9.3 g per person per day by 2019.

The industry made further progress in reducing salt levels. In 2014, the bakery industry reduced salt levels from 2% to 1.8% and pledged to make further reductions. In 2015, the Ministry of Agriculture set a mandatory maximum limit for salt in bread and baked goods of 1.4%. In 2016, the biggest meat products producer voluntarily reduced salt content by 25% in its products.

These efforts were supported by awareness-raising and communication activities. Although there is more work to be done, Croatia hopes to reach the 30% reduction in salt intakes target by 2025.

The Netherlands' experience with food reformulation

The Netherlands shared experience of its approach to reduction of NCDs, including hypertension, through food reformulation.

In 2014 the Minister of Health signed a voluntary agreement (covenant) with the food industry, whereby the industry agreed to ambitious reductions in levels of fat, saturated fat, salt and sugars in their products. For salt, this amounts to a 30% reduction. Food companies are supported by a technical working group and an independent scientific committee critically assesses the pace and ambition of the industry commitments. Furthermore, the Minister chairs a supervising committee and reports on progress to parliament. Finally, there is a monitoring system in place to track levels in foods and average intakes (using sodium excretion studies).

The majority of the commitments made have related to salt. In general, these were commitments were not very ambitious (around 10%) and civil society has been critical of this lack of ambition. However, a recent monitoring study found that, among products where there had been commitments, the reductions were actually greater than those promised—with reductions of between 12 and 26% in sauces, soups and breads. In the population studies, however, no real decrease in sodium intakes has been recorded so far. This may be explained by consumption of products not covered by the covenant, which may actually have increased salt levels. In order to have a real reduction in intakes, therefore, it is important to broaden the scope of reformulation to include more food categories and more products.

Discussion

There was clarification about the best methodology for measuring population salt intakes. The gold standard approach for measuring individual intakes is the 24-hour urinary sodium excretion method. To date, relatively few countries in the Region have adopted this methodology. The majority of data available is based on dietary surveys. There is a real need to improve the quality of data. It is also important to improve available data on food composition. WHO has an ongoing project with some Central Asian countries looking at salt and trans fats levels in products sold on the streets and in markets.

There was discussion about whether particular sectors of the food industry might be more likely to take the first step on reformulation. In the Netherlands, for example, the largest food companies were keen to make changes because they had access to the necessary technology. It is vital, however, to include *all* types of industry and all stakeholders in such a process.

Lithuania's cardiovascular risk programme

Lithuania shared its experience with cardiovascular risk programme. In 1995, the Ministry of Health approved a national programme focusing on identifying persons at high cardiovascular risk and developing prevention programmes, along with screening and counselling. The programme is covered by the state health insurance fund and is implemented in both primary and specialist care providers. Men aged 45-65 years and women aged 50-65 years benefit from annual screening. The number of people screened doubled between 2012 and 2015 and the number of people with hypertensive diseases has decreased slightly over the last three years.

A new legal Act was introduced to cover health promotion measures for people at cardiovascular risk, to enhance new health promotion activities and empower people to lead healthy lifestyles. The Act describes procedures for delivery of screening and training for people at risk, involving a multidisciplinary approach and delivered by primary health care providers and municipal public health bureaux.

In 2015, it was estimated that at the end of the programme 68% of participants had made personal progress. This ranges from 41% in relation to smoking and 54% on blood pressure to 74% on reducing salt intakes.

PEN in Uzbekistan

Uzbekistan reported on its experience in implementing WHO's Package of Essential Noncommunicable Diseases (PEN) interventions for primary health care in low-resource settings.

In 2015, the government adopted a national programme on prevention and control of NCDs and improving nutrition and a national committee was established. The programme was implemented as a pilot project in two regions of the country. Regional coordination councils were set up and an action plan was developed, covering both population-level and health system approaches.

In September 2015, with WHO support, implementation of the PEN clinical protocols for NCDs was started, initially in eight primary health care facilities. Quarterly monitoring, over an 18-month period, showed that the tools were very efficient. As a result of the programme, detection of people at risk of CVD increased by over 70%, compliance with clinical protocols improved and clinical outcomes were better.

In March 2017, the government issued a resolution on expansion of use of these clinical protocols throughout the country, initially for hypertension and diabetes. Later in 2017 there will a special training programme on asthma management, which will be applied countrywide from next year. Discussions with the Ministry of Finance will involve presenting economic arguments (as well as evidence on effectiveness) to advocate for adequate investment in health.

Hypertension control in Kyrgyzstan

Kyrgyzstan reported on its experience on hypertension control. A STEPS study identified high prevalence of hypertension among the population aged between 24 and 60, along with poor access to treatment. It was decided, therefore, to implement the PEN protocol on cardiovascular disease.

Two indicators—the number of patients registered by a family doctor for educational sessions and the change in blood pressure—are used to evaluate the work of family doctors and medical nurses. In addition, there are also indicators for family medicine facilities, such as registration of patients with hypertension. The health insurance fund also works as an auditor for family medicine centres. Another indicator is the number of registered patients, which is used to determine funding of these centres.

At the community level there are around 1200 rural committees of health. Currently, volunteers are being trained to measure blood pressure to facilitate early detection of hypertension. Finally, with WHO's support, a roadmap is being developed for handling acute myocardial infarction and cerebral stroke.

Screening for hypertension in Kazakhstan

Kazakhstan's national hypertension screening programme has, since 2008, been offering screening and medical examination to 1.5 million 40 – 60 year olds per year to facilitate early detection of hypertension. The detection rate for early development of circulatory diseases is about 8% and for hypercholesterolaemia is around 11%. The SCORE system is used to determine cardiovascular risk and research facilities have prevention units and doctors provide counselling on healthy lifestyles. An integrated model for management of NCDs has been implemented and a person-centred approach is followed, with self-management. The country is currently scaling up a successful pilot project, which took a group of patients and obtained positive results.

A complex strategy is in place to promote healthy lifestyles. The 16 regional health centres, and the national healthy lifestyle centre, introduce all the necessary measures to reduce use of tobacco, alcohol and psychoactive drugs, etc. Numerous legislative measures have been introduced, and there is an active excise duty policy, as well as development of high-level, tertiary prevention. National studies on healthy lifestyles are showing signs of improvement. In the new government policy for Health2020, new institutions are being created to protect public health—the government approved plans to establish a public health service, a public health committee has been set up, there is a department of public health strategy and a new institute for the protection of public health is being created. Legislation is planned to help reduce consumption of foods high in fats, sugars or salt.

Discussion

Between them, these three country experiences highlight both the prevention and treatment aspects that are needed to tackle hypertension. The examples touched on the importance of quality assurance, monitoring and evaluation, access to medicines, training of clinicians and other health workers, involvement of patients and volunteers, and community initiatives to support primary care-based efforts.

Where next for NCDs in Europe?

Dr Raniero Guerra, Ministry of Health, Italy, set the scene for the session to explore the next steps for the European Region in terms of NCDs, and introduced official addresses by the Russian Minister of Health and the Assistant Director-General of WHO.

Official address by Professor Veronika Skvortsova, Minister of Health, Russian Federation

The Minister began by acknowledging the huge burden of death and disability globally that is due to NCDs.

The *Global Ministerial Conference on Healthy Lifestyles and NCDs Control*, held in Moscow in 2011, resulted in the Moscow Declaration which set out the major principles and laid the foundation for the Political Declaration of the High Level Meeting at the UN General Assembly in September 2011. In line with the Political Declaration, Member States have worked with WHO to develop an infrastructure for tackling NCDs. This includes the setting of nine global goals, definition of 25 indicators, establishment of a global monitoring framework and creation of a global coordination mechanism. These ambitious goals are dependent on a great deal of work at the country level. National governments have to develop national goals for NCDs and strategies for multisectoral collaboration.

NCD control is a top priority for Russian government policy and there are two main dimensions:

- Population-level prevention activities and strategies for healthy lifestyles
- Ensuring an adequate public health system response in terms of risk factor identification, early detection of disease and effective control.

These dimensions require a lot of intersectoral cooperation, bringing together different government institutions, civil society and individuals. The best way to organise such intersectoral collaboration is through adoption of a national strategy and action plan for NCD prevention and control, such as the Russian Federation's governmental programme for public health development and similar programmes throughout the Region.

In order to prevent NCDs, the Russian Federation is implementing a comprehensive programme to motivate citizens on healthy lifestyles. Starting with children as young as 3 years old, the programme builds up throughout the education and higher education systems, then carries on into the workplace.

Between 2012 and 2016, per capita consumption of alcohol was reduced by 13.5%. The number of people regularly participating in physical activity was increased by 18%. Prevalence of tobacco smoking among adults fell from 39.4% in 2009 to 30.3% in 2016 (equivalent to a 21.5% drop), and both smoking in young people and passive smoking were also reduced. The progress achieved in this time period demonstrates that public health responses and legislative approaches are valid.

Preventive screening to detect NCDs early was widely introduced in 2013—once every three years for adults, once a year for children. From February 2018 there will be regular screening for adults for different cancers in various age groups. Thanks to the screening of 87 million adults and the entire child population, it has been possible to expand regular check-ups for people with

chronic NCDs to cover nine million people. In 2016, 65% of all malignant neoplasms were identified at stage 1 or 2, leading to a reduction in annual cancer mortality and an increase in five-year survival rates. The great challenge of cardiovascular mortality and morbidity has been addressed by improving response to serious vascular events, through establishment of more than 590 cardiovascular centres and 590 stroke units across the country. These are all brought together by the shared telemedicine system, making it possible to reduce inpatient cardiovascular mortality by 6% and enabling over 60% of stroke patients to leave hospital with little disability and to receive physical therapy if required.

Since the establishment of the new WHO office on prevention and control of NCDs, based in Moscow, there has been a significant expansion of work in this area and the impact is already evident.

The Minister is confident that the meeting will result in an appropriate contribution from the European Region to the global discussions in Montevideo in October 2017 and on to the High Level Meeting in New York in 2018. She wished all participants success in this shared cause.

Official address by Dr Oleg Chestnov, Assistant Director-General, WHO

Dr Chestnov thanked the Minister for her contribution, and congratulated her on successfully presiding over the World Health Assembly in 2017, and set out the global mandates for action on NCDs.

The rationale behind the meeting is to facilitate rich discussions that provide people working at the grassroots level in Member States with all the ammunition necessary to successfully tackle NCDs. European and global success in this endeavour in the future will be dependent on efforts at the country level. From an NCD perspective, *all* countries are 'developing' countries in one sense. Even the richest countries in the world require technical support from WHO in order to be able to respond to the challenge of NCDs. In simple terms, the idea is for all concerned to be better equipped to stop people from dying before the age of 70 years old.

In 2015, 15 million people died from NCDs between the ages of 30 and 69, globally, and these premature deaths could have been largely prevented. While the process does tackle the whole population, this age group is the primary focus for the first steps. The number of premature deaths from NCDs among women is increasing in all except the high-income countries, and in men it is increasing in all regions except the European Region. The Region is to be congratulated on this achievement and the proposal to consider a more ambitious regional target for reducing premature mortality is very welcome.

It is very important that health is now integrated into the Sustainable Development Goals. This means that countries—through their Heads of State—have committed to working towards these targets. Globally, however, despite a 17% drop in the risk of dying from the four main NCDs between 2000 and 2015, the rate of decline is insufficient to meet the SDG target of reducing premature mortality by one third by 2030.

Importantly, the commitments made by world leaders to curb premature deaths from NCDs, starting with the Moscow Declaration in 2011, gave the mandate to WHO to lead this fight. The next key milestone will be the third High Level Meeting in September 2018, at which point world leaders will decide whether to renew that mandate for WHO to continue the work.

To achieve the Sustainable Development Goals, world leaders defined how the SDGs would be implemented, and how funding would be allocated, in the Addis Ababa Action Agenda. A new model for financing was proposed, with three pillars: catalytic funding from WHO; domestic finance, which can be boosted by price and tax measures on tobacco and other products; and return on investment, recognising that investment in health systems will bring economic benefits.

WHO's assignment from the UN on NCDs, in the form of time-bound commitments in the 2014 UN Outcome Document on NCDs, includes helping countries to set national NCD targets, to develop multisectoral action plans, to implement the 'best buy' interventions on risk factors and to strengthen health systems in different ways.

An updated list of the most effective tools for NCD interventions (the best buys) was endorsed by the World Health Assembly in May 2017. The forthcoming WHO Global Conference on NCDs in Montevideo, 18-20 October 2017, aims to produce a very clear roadmap for tackling NCDs between 2018 and 2030 to drive forward progress towards SDG target 3.4.

Progress in the European Region

On behalf of the Regional Director Dr Zsuzsanna Jakab, Dr Galea presented an overview of progress in the WHO European Region.

Implementation of the Health 2020 regional framework, adopted in 2012, is now well underway. The strategic objectives of the framework are to reduce inequity and to increasing participatory governance for health. The recently completed country capacity survey provides an update on progress in these areas.

In relation to governance and surveillance there have been real improvements. National time-bound targets and indicators have been set (an increase of 125%), functioning routine cause-specific mortality systems have been established (up 10%) and multisectoral action plans have been adopted (17% increase). Importantly, 10 eastern European and central Asian countries conducted STEPS surveys, covering nearly 10% of the European population. By 2018, with new surveys over 200 million people will be covered.

Tobacco smoking is declining, but not fast enough to achieve the target. There are many signs of improvement. Most of the countries, globally, that have plain packaging legislation are in the European Region and there have been important examples of success. There has been a 933% increase in the adoption of effective health warnings (partly due to transposition of EU law).

In relation to alcohol, the time series data are lacking to be able to report on progress over the period in question. It is clear, however, that there are many initiatives underway and examples of success—not least, the decade-long decline in alcohol consumption in the Russian Federation. Nonetheless, the decline is not currently fast enough to be on track to meet the target.

There have been some improvements in measures to improve diet and physical activity. Countries have been promoting awareness (up 13%), reducing salt and sodium levels (increase of 26%), implementing the WHO recommendations on marketing to children (up by 59%) and taking action to limit saturated and trans fats (41% increase). Obesity and overweight, however,

continue to grow at a fast pace. Projections suggest that the rates will continue to rise and there will be no levelling off, as would be needed to meet the global targets.

While hypertension is declining overall, much more needs to be done to improve clinical preventive services.

The overall picture of progress thus far can be summarised by the Regional scorecard (Figure 9), which suggests that, if current trends continue, the overall premature mortality and the hypertension targets will be met. In all the others, however, there is major scope to accelerate achievement.

Figure 9 Global Monitoring Framework scorecard for Europe

There is great cause for optimism because the tools and knowledge do exist to be able to achieve this in the coming decade, through the combined efforts of Member States in the Region with support from WHO.

Statement from the South-eastern Europe Health Network (SEEHN)

As a representative of the former Yugoslav Republic of Macedonia, which currently has the presidency of the South-eastern Europe Health Network (SEEHN), Dr Igor Spiroski, Institute of Public Health, delivered a short statement on behalf of SEEHN.[5]

SEEHN ministers of health gathered at the Fourth Health Ministerial Forum, Health, *Well-being and Prosperity in South East Europe in the Framework of the UN Sustainable Development Goals 2030* in Chisinau, Republic of Moldova, on 3–4 April 2017 to discuss the progress made and to promote continued enhanced cooperation on public health in the south-east Europe region. A pre-meeting on NCDs was held on 2 April and the brief summary of those discussions is presented as a contribution to the European roadmap for tackling NCDs by 2030.

First and foremost, Ministers of the SEEHN acknowledged that achieving universal health coverage (UHC) for the populations of South-east Europe requires full and extensive implementation of the Action Plan for Implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012−2016.

[5] Members are the Republic of Albania, Bosnia and Herzegovina, the Republic of Bulgaria, the State of Israel, Montenegro, the Republic of Moldova, Romania, the Republic of Serbia and the former Yugoslav Republic of Macedonia.

During the pre-meeting with representatives from SEEHN Member States the global and European context and developments in the prevention and control of NCDs were discussed, as well as current capacities of the SEEHN countries in this domain.

Countries from SEEHN have made good progress in tackling NCDs. They are well on track to achieve the premature mortality reduction target by 2025 and 2030. However, progress is uneven and there are significant threats, namely the increase in obesity prevalence.

The majority of countries have recently adopted new or revised old strategies and action plans on NCDs. A significant improvement in the implementation of tools for management of NCDs—such as cancer screening, registries and primary care based interventions—is also evident.

Good innovations have been identified, but the area of prevention could be improved. In particular, by considering the use of emerging evidence-based tools, such as, fiscal policies, better labelling, and marketing controls. There is significant interest in moving forward in the areas of intersectoral action, commercial determinants of health, health workforce, surveillance, monitoring and evaluation.

Significant progress has been achieved. The SEEHN countries have significantly contributed to the positive trend in the European Region, however, they are now facing new and challenging developments. These include the obesity epidemic, stubbornly-high salt consumption and incredibly high levels of physical inactivity.

The SEEHN aligns itself with the WHO Regional Office for Europe in congratulating all Member States for huge progress towards achieving the global targets in the areas of alcohol and tobacco, thereby making a major contribution to the reduction of premature mortality where the European Region is in the driving seat of this global transformation process.
SEEHN countries, however, would like to be more ambitious, and believe that progress could extend far beyond the global premature mortality target. The challenging proposal set out by WHO/Europe for a more ambitious target is welcome.

SEEHN countries consider that it is also important to consider quality of life as life expectancy increases and the impact of NCDs on quality of life as differences across the region are stalling.

Key actions needed in country context to achieve the global NCD targets

An online consultation gave participants 10 minutes to respond to the question '*What are the key actions needed in your context to achieve the global NCD targets?*'. Participants were encouraged to provide their key ideas and to cover the NCD best buys for the population as a whole, as well as for high-risk groups. Replies were collected from 67 participants, with some providing several replies. The responses were clustered, by subject, and analysed for frequency of response.

The most commonly-cited responses were in the area of **population-level prevention or health promotion**. These included:

- Fiscal policies: Advocate for and/or implement taxation or price policies
- Legislation: enact and enforce
- Information and education
- Other actions on specific determinants (not fiscal/legislation)

- Supportive environments: Make healthy choice the easiest choice
- Implement or strengthen national prevention programmes
- Address commercial determinants of health

Of the actions on specific determinants and risk factors, the responses comprised:

Diet
Reformulation / Fiscal policies / Address marketing of HFSS foods to children / Reduce portion sizes / Front of pack labelling / Improve nutritional quality food service sector / Action on trans fats

Tobacco
Taxation / Legislation / FTCT implementation / Tackle illicit trade / Enhance smoking cessation support / Action in schools / Action on e-cigarettes / Plain packaging

Alcohol
Taxation/Pricing policies / Raise awareness / Warning labels/ Target young people (especially on binge drinking)

Physical inactivity
Improve infrastructure / Invest in measuring and assessing progress / Include specific indicators on physical activity / Implement PA 'best buys' / Increase PA in schools

Air pollution
Address environmental risk factors

Gender
Address unhealthy life expectancy of women

Responses relating to issues of **governance and accountability** also featured prominently and responses covered the following issues:

- Facilitate intersectoral collaboration
- Strengthen political commitment
- Generate better data and disseminate
- Adopt and implement national strategies and action plans
- Move ahead with implementation
- Invest financial resources
- Implement a participatory approach, involving civil society
- Make use of international cooperation
- Build capacity
- Sharing experience and good practice
- Ensure better coordination
- Address relations with industry
- Allocate human resources
- Use digital tools and social media

A third, less frequent, grouping of responses related to improving treatment and control of NCDs and to strengthening health systems. These responses focused on the following issues:

- Focus on integrated and patient-centred care
- Improve primary care health professional training
- Enhance quality, availability, accessibility and use of health care services
- Expand provision through primary care
- Hypertension control: Improve awareness and treatment compliance
- Obesity: Classify as a disease and manage obesity at primary care level
- Identify populations at risk needing selective interventions

How the European Region can be more ambitious in reducing the NCD burden

Participants were also asked, through the online consultation, to suggest how the European Region could be more ambitious in reducing the NCD burden, given what has already been achieved in the country context. As above, replies were collected from 67 participants. The responses were clustered by subject and can be summarised as follows:

- **Strong commitment to implement best buys and current policies**

  Most commonly mentioned specific areas:
  - Use of taxation
  - Strengthen tobacco control
  - Improve health systems and strengthen comprehensive NCD prevention and control in primary health care
  - Information, education, communication

- **Governance and accountability**
  - Adopt an intersectoral approach and involve all stakeholders (whole-of-society approach)
  - Secure more funding (including EU funding and seeking innovative sources)
  - Advocate for political commitment
  - Build capacity
  - Improve coordination
  - Protect science and policy from influence of vested interests
  - Strong clear communication and advocacy (including making the economic arguments)

- **Suggestions for a shift in focus or for prioritization**
  - Focus on Member States with highest NCD burden, low income communities, decreasing gender gap and closing socioeconomic inequalities
  - Children: Implement a life-course approach / tackle adverse childhood experiences; Frame NCDs as way of protecting children
  - Targets: Set higher target (as suggested) and leapfrog where possible; Focus on targets lagging behind; Translate NCD targets to sub-region targets
  - Measure morbidity and disability outcomes
  - Use SDGs process to promote health and wellbeing
  - Greater focus on legislation and taxation, and focus on commercial determinants of health
  - Prioritize applying best practice more evenly across all countries

- **Collaboration and cooperation**
  - Exchanging best practice and experience of success and failure e.g., through twinning programmes, staff exchanges, field visits, mentoring/support from high income countries to lower income countries, database of cost-effective prevention interventions, use of digital tools
  - Stronger interdisciplinary collaboration and advocacy, especially on win-win objectives with other policy areas
  - Explore areas for cross-border action (e.g., on marketing, labelling, taxation, subsidy and reformulation).
  - Encourage/push industry to take action
  - More use of sub-regions within the Region
  - Adopt a framework agreement on reducing harmful alcohol consumption in the Region

- **WHO support**
  - Physical presence of WHO high-level officials in country to support Member States
  - Expand the NCD toolkit
  - Provide Member States with evidence-based information
  - Apply lessons from successes in other areas of public health

  - Strengthen WHO's role on interagency cooperation and greater focus tobacco and alcohol sales reduction policy
  - Provide training for specialists on improving interagency collaboration on NCD control and prevention

- **Innovate**
  - Use behavioural insights for health (behavioural economics)
  - Introduce advanced technologies for prevention

With both questions combined, the most common issues raised, and their relative frequency, are shown in Figure 10.

Figure 10 Frequency of responses to the two questions – both questions combined

Governance, political will, leadership, Health in all policies, all levels of government (national to local), commercial determinants, infrastructure	100%
Price, taxation, financing	33%
Capacity building, exchange platforms, document examples, innovation	30%
Surveillance, targets, evaluation, monitoring, identifying priority populations, advanced analytics, digital tools, goal setting	30%
Prevention, health promotion, environment links and environment change	30%
Control, management, health systems, care	25%
Information, awareness, literacy	22%
Reformulation, labelling, portion size	15%

Discussion

Dr Luigi Migliorini, WHO Regional Office for Europe, facilitated a discussion on the key actions needed at both country and regional level, following reflections on the two questions for the online consultation.

Member States made a number of specific suggestions to help drive forward progress. In addition to learning about examples of success, it is also helpful for Member States to hear about problems that others experience on the ground. It was suggested that more information on other countries' experiences would be very valuable and that a platform to enable sharing of such information could be extremely useful. The importance of starting efforts to tackle NCDs at a very early age, through a life-course approach, was also emphasised. In addition, there is a need to develop a clear strategy for working with the media, and to raise awareness among media actors of their role and responsibility in this area. Intersectoral collaboration is critical, particularly in the face of various commercial determinants and the influence of vested interests.

A point of information was provided on HEPA Europe, a network of more than 160 institutions across Europe involved in promoting health-enhancing physical activity. The European Region is to be commended for its progress on promoting physical activity, and particularly for adoption of a specific regional strategy on physical activity. It is regrettable, however, that it is not possible to assess progress on tackling physical inactivity due to lack of data. It was suggested that there should be assessment of more indicators specifically relating to physical activity.

Specifically in relation to the proposal that the Region aim for a more ambitious target for reducing premature mortality, there was support from civil society. It is clear that much more action is needed, and it is also clear what needs to be done. The three targets where progress is particularly lacking relate to alcohol, tobacco and diet. These are areas where three of the best buys recently endorsed by the World Health Assembly are key—namely, restrictions on marketing, better nutrition labelling and school programmes. It was suggested that it is time for the Region to acknowledge the limitations of self-regulatory approaches.

There was some discussion of the need to maintain attention on morbidity, as well as mortality. It was suggested that too narrow a focus on reducing current mortality risks missing an important element of the case for tackling NCDs, namely the protection of children. Reframing NCDs as an issue that relates to the wellbeing and prosperity of today's children and future generations would help generate political will for action.

It is important to better understand the relative contributions of prevention and treatment to achievement of the targets. This would potentially be a fruitful area for collaboration, with, for example, sharing of methodology and findings from modelling exercises to explore these issues. It was suggested that effective national registries (e.g., cancer registries) are an important tool for being able to enhance understanding of the impact of policies and interventions.

In conclusion, the discussion pointed to the importance of documenting action taken and sharing information, highlighted the importance of some basic interventions that can maximise the impact of other actions, underlined the contribution of risk factors—such as physical inactivity—that feature less prominently in the monitoring framework and emphasised the importance of continuity for establishing sustainable responses. In addition, there is a need to clearly articulate public health arguments, particularly in controversial areas, and to set out the case for public health gains and economic impact. Furthermore, collection of quality data is critical to improving understanding of the impact of interventions, and to be clear about whether interventions impact on morbidity and/or mortality. The future will be challenging—as newer, much more expensive, treatments which improve survival become available no health system in the world will be able to support the long-term costs. It is abundantly clear that these messages need to be disseminated much more widely and to reach audiences outside the health sector.

Commercial determinants: peril or partnership in the roadmap to 2030

Dr Lela Sturua, National Centre for Disease Control and Public Health, Georgia, introduced the plenary session on commercial determinants of health. Positioning health and framing the NCD agenda in relation to this important group of determinants is vital for driving forward progress. Advancing the systematic consideration of the private sector is important for progressing the NCD agenda in this increasingly globalised and consumer-oriented world.

The perils of partnership

Professor Jonathon Marks, Pennsylvania State University, United States, reviewed the issues surrounding partnerships in health policy and challenged the current partnership paradigm.

Partnerships are often presented as win-win-win scenarios—whereby governments, companies and consumers win—for tackling some of today's health challenges. There are, however, many examples of partnerships that are highly problematic. In one example, a month-long school-

based campaign aiming to improve sanitation was sponsored by a major soft drink brand, in partnership with a wide variety of stakeholders, including one UN agency. This sets out to tackle one public health issue while—by essentially marketing a sugar-sweetened beverage—potentially exacerbating another health problem. Between 2011 and 2015, two major soft drink companies—the Coca Cola Company and PepsiCo—were found to sponsor 96 national health organisations in the United States. During this period the two companies were reported to lobby against 29 public health bills intended to reduce soft drink intakes or improve nutrition *(3)*. Such partnerships undermine the mission and integrity of any agencies involved. In another example, an investigation by the BMJ revealed the extent of the web of influence created by the sugar industry in the UK through funding groups and individuals involved in public health *(4)*.

Partnerships do not always involve the exchange of funds. Sometimes, they are justified on the basis that they can extend the reach of health messages. Very often, however, companies are also allowed to feature their logos on communication materials. In the words of a former food industry executive, this is really about looking '*angelic while making consumers feel good about the brand and drawing attention away from the unhealthful nature of the company's product'(5)*.

Currently, these issues tend to be addressed in relation to perceived conflicts of interest, but a much more robust approach is required. There is a very strong case for separation of public and private sectors. Such separation is important irrespective of how well intentioned the private sector actors may be. The importance of separation is already recognised within both the public and private sectors. Within government, for example, separation of powers between the different branches of government is recognized as essential. Within the private sector, there is a certain need for tension and conflict between different private sector actors for healthy, competitive markets. There is less recognition, however, of the tension and conflict between governments and the private sector. Neither sector can properly fulfil its role without effective arm's length separation.

Current norms for partnerships take the form of different pockets of rules—such as conflict of interest policies, codes of ethics, lobbying regulation, campaign finance rules, etc. There is a compelling case, however, for a set of principles to govern such relationships. These principles could include independence, integrity, credibility, stewardship, common good and anti-promotion.

It is a mistake for health entities to think that achieving common ground with industry is necessarily good for the common good. Partnerships risk creating 'perils of reciprocity', which can particularly impact on third parties. The influence of private sector partners can be very subtle, by, for example, framing the debate or distorting the agenda. These kinds of relationships, therefore, pose a threat to institutional integrity and risk undermining public trust and confidence.

To move forward, therefore, there is a need for governmental counter-strategies, which extend beyond conflict of interest policies. The default should be arm's length separation between governments and commercial interests, and any closer relations should require compelling justification. Any relationships should be no closer than necessary—they should not involve, for example, incorporation of corporate logos, font, colour schemes, promotion—and governments should not talk about 'partnerships' with the private sector. There is a role for different forms of public-public collaboration, whether these are between governments (horizontal), between WHO and Member States (vertical) or mixed.

Fighting the tobacco industry

Professor Mike Daube, Curtin University, Australia, outlined some lessons from more than 30 years of activism on tobacco control.

While, in some senses. tobacco is different because it is lethal when it used exactly as intended, there are many parallels with other health determinants. As highlighted by WHO Director-General, Dr Margaret Chan, it is not '*just Big Tobacco anymore. Public health must also contend with Big Food, Big Soda, and Big Alcohol*'. These industries learn from one another, and it is important that the public health community also draws clear lessons from tobacco in order to respond to other commercial determinants of health.

A number of harmful industry strategies were set out in the Lancet in 2013:

- Bias research findings
- Co-opt policymakers and health professionals
- Lobby politicians and public officials to oppose public regulation
- Encourage voters to oppose public health regulation
- Deflect criticism, promote actions (on topics) outside their areas of expertise
- Offer alternative (invariably voluntary) approaches designed to have minimal impact, but that will cause delay or deter policymakers from introducing regulation that will curtail their own activity *(6)*.

In addition, some further industry approaches can be identified:

- Working through third parties, front groups and fake organisations
- Litigation against governments and health organisations, which can create a 'regulatory chill' effect that discourages regulatory action
- Ever-increasing lobbying
- Attacking and intimidating public health organisations and individuals
- Corporate social responsibility activities to polish their image
- Seeking scientific credibility, funding research and researchers, publishing in sympathetic journals
- Reassurance marketing and other action to undermine governments and health authorities – even trying to present their product as healthy
- Distraction strategies
- Using their campaigns on issues such as tobacco and alcohol to attack and undermine public health more broadly.

Despite these strategies, health groups have made tremendous progress including advertising prohibitions, laws on smoke-free public spaces, plain packaging legislation, court defeats for companies and adoption of the WHO FCTC by 180 countries. Key features of such progress include the strength of the evidence (and new ways of presenting evidence), evidence-based recommendations, comprehensive approaches, consensus positions, coalition and partnerships between governments and civil society, strong innovative advocacy, exposing and opposing the industry and its arguments and the FCTC. In addition, there has been recognition that progress is sequential and that there is a need to avoid complacency, to stay united across sectors and, most importantly, to keep going.

There are a number of key lessons for other areas:

- Key role for advocacy—outside and inside governments
- Consensus and coalitions are important—need to build a united front
- Communicate with clear messages
- Be creative—there are always new approaches
- Expose and oppose the opposition—and always be alert to new industry approaches
- Remember the Scream Test—do the things that industry contests the most
- The power of an international treaty
- Work nationally—as industry works nationally, so must public health
- Stay with it—overnight success takes time
- Learn from mistakes as well as successes—such as the early mistakes that meant that not enough was done to monitor and counter industry tactics.

In conclusion, it is clear what needs to be done and success is possible if health advocates are as strategic, united and persistent as industry opponents. A key message is that this is a long-term task, because apparent 'overnight success' takes time. In this way it is possible for European countries to become the so-called 'darkest markets' that tobacco industry considers to be hostile operating environments.

Front-of-pack labelling in France: evidence-based cooperation

Ms Christine Berling, Ministry of Solidarity and Health, France, described how an evidence-based collaborative approach had resulted in front-of-pack nutrition labelling regulation, despite initial, united industry opposition.

The observatory on food quality identified variations in the sugar content of soft drinks and breakfast cereals, showing that some products have considerable margins for improvement. In order to enable healthy choices by consumers, encourage reformulation and facilitate nutrition counselling, therefore, a front-of-pack nutrition labelling scheme was proposed. A scientific approach was adopted, in order to evaluate the impact in real life, gain consumer confidence and involve industry in promoting use of the voluntary logo. A broad consultation sought views and a proposal by the French food industry body (FFAS in its French acronym) for a study to analyse the impact of such labelling on the nutritional quality of food purchases was accepted.

The objective of the study was to differentiate systems on the basis of their impact on the nutritional composition of shopping baskets. The nutritional quality was evaluated using a scoring system based on the UK Ofcom nutrient profile model.

Four labelling schemes—Nutri Score proposed by scientists; SENS proposed by retailers; Nutri Repere proposed by the agri-food industry; Nutri Couleurs based on the UK multiple traffic lights scheme—were evaluated in 'real' conditions in 60 supermarkets over 10 weeks in late 2016. Labels were put onto fresh prepared foods, industrial sweet breads and pastries, and prepared canned foods. Around 1,300 products were covered. The main tool for evaluation was the data from cashier receipts through loyalty cards. The study was co-funded by the Department of Health, health insurance funds and the federation of food industries.

The study found that three of the four systems were effective in improving the nutritional quality of the baskets. In general, the biggest improvement occurred with the Nutri-Score system and this system also resulted in even greater improvements in the baskets of consumer who buy low price products. Furthermore, these healthier baskets did not cost more.

Complementary studies included a questionnaire to estimate the readability, understanding, purchase intent and satisfaction level of consumers. This found that Nutri-Score labels, followed by SENS, are the most readable. In addition, a framed field experiment in a *virtual* supermarket also found that the greatest nutritional improvements to food baskets were obtained with the Nutri-Score. The results of this latter study aligned well with the results of the real life study described above, but this type of study is much less expensive. This validated methodology could, therefore, be usefully applied in other Member States.

This research demonstrates the interest and feasibility of such studies for measuring the impact of nutritional labelling in real purchasing conditions. It also shows the capacity of nutrition labelling schemes to significantly improve nutritional quality of food purchases. Schemes providing summary score are better understood and are more useful than those that provide a nutrient-by-nutrient analysis. The Nutri-Score was clearly shown to be the most effective, particularly for consumers who buy the cheapest products or have the lowest level of education.

The initial unified industry opposition to the scheme was dissipated after the study found that people are likely to buy *more* products which feature front-of-pack labelling.

A Charter Commitment has now been signed by three Ministries (Health, Agriculture, Consumers), three retailers and one food producer. The government notified the European Commission in April 2017 of its intention to legislate and is, therefore, obliged to wait three months before full implementation. The Nutri-Score is free to use but is trademark protected and registration is required, in order to facilitate monitoring of its use.

Best buys and win-win: using economic evidence on the negotiating table

Professor Franco Sassi, Imperial College London, presented an overview of how economic evidence can be used to advocate for health policies and interventions.

It is clear that the current context for NCD prevention is a multi-stakeholder landscape, in which government is one of many stakeholders. It is also clear that there are many different parts of government that need to be engaged. This means that the health sector needs to find partners within government with which to work. It is important to recognise that there are other sectors of government whose remit includes promoting business. There is a need, therefore, to think carefully about how to work better with colleagues across government sectors.

There are opportunities and challenges associated with multi-stakeholder approaches. According to game theory, co-operation is preferable to conflict. Private sector interventions are potentially cost-effective and, particularly when public finances are stretched and intervention costs are high, multi-stakeholder approaches can help mobilise financial resources from the private sector. However, more evidence of effectiveness and independent monitoring are required.

There is a need for simulation models to make policy decisions for NCD prevention. This is because the long-time frame required in order to demonstrate an impact on health outcomes means that short-term studies are of limited value. It is also virtually impossible to use direct observation studies to separate the policy effects from confounding factors. In addition, the heterogeneity of individual characteristics and policy responses means that only simulation models can adequately deal with the complexity. Furthermore, a variety of outcomes are needed to satisfy a wide range of information needs.

Various models exist and each needs data and a series of assumptions. These assumptions can be negotiated with other stakeholders, in order to reach consensus on different scenarios to test. Models can be used to estimate health outcomes, financial impacts, affordability and labour outcomes. Models can also be used to estimate the market impacts of interventions. It is possible, for example, to model the impact of dietary changes in response to WHO dietary guidelines on consumption, world prices and production levels for different foods (e.g., beef, cheese, vegetable oil, coarse grains). The impact of dietary changes to achieve a diet with not more than 10% of energy from saturated fat, for example, could drive down market prices for beef by 20% in 10 years. In market terms, this is a major effect. Governments need to be alert to industry concerns, therefore, and to provide answers and solutions, such as compensatory mechanisms, particularly for low-income producer countries.

Business stakeholders are generally opposed to command and control approaches because they are considered to create market barriers and constraints, entail regulatory compliance costs and cut revenue and profits (fiscal policies). In addition, they object to use of health taxes because these effectively 'label' products as unhealthy. However, regulation may also bring advantages to industry by creating a level playing field and preventing free-riding or opportunistic behaviours. Large players may especially benefit because of their diverse portfolios, brand reputation and their research and development (R&D) capacity. It is a role for governments, therefore, to ensure that not only big players benefit from regulation.

In conclusion, business stakeholders will always have an influence on health policies and outcomes, and co-operation is not only unavoidable in certain areas but is also potentially beneficial. Policy models provide an excellent platform for multi-stakeholder dialogue, but require a structured process and must be extended to assessing market impacts. Finally, large business players are especially important counterparts for governments.

Discussion
It was acknowledged that health sector terminology is not always well understood in other departments. This is why it is critical to simulate market impacts, revenue flows and consumer behaviour to facilitate dialogue with other sectors.

There was some discussion of the dilemma facing academic departments, particularly in the context of austerity policies, because donors sometimes require partnerships with private sector institutions. This is a deeply problematic issue that needs to be addressed because industry funding can frame the kind of research that is carried out, research shows that industry-funded research produces more industry-friendly findings, and this type of funding is a major part of industrial webs of influence. This means more dialogue about public funding for academic research is required.

In relation to front-of-pack nutrition labelling, there was clarification that the Nutri-Score is an average of all the components of a food, giving one overall score for a product. There is no need, therefore, to focus on the one or two nutrients/components of most concern. The French experience also suggests that governments need to take the lead on this issue, but that involvement of NGOs is also necessary.

Lessons from countries

Dr João Breda invited countries to report on their lessons in addressing commercial determinants. It is clear that there have been achievements in these areas, but that there are also barriers, including within governments. Key concepts, such as arm's length separation, the importance of evaluation and the need to be persistent in pursuing an issue over time, can help.

Nutrition labelling in Israel

Israel reported on comprehensive strategies being adopted to tackle the almost 30% of deaths in the country that are due to unhealthy lifestyles and the challenge of millions of Israelis living with multiple NCDs.

An initial voluntary approach to salt reduction in foods resulted in a 23% reduction in salt use. The programme is now entering a regulatory phase with introduction of mandatory front-of-pack labelling. This will include gradual introduction of red warning labels for high sodium, sugar and saturated fat and positive green labelling for the healthiest foods. As time goes on, the threshold for the red warning labels will be tightened.

It has not been easy to move from a voluntary to a mandatory approach, but the government has been able to convince the industry that there is no alternative and the partnership continues.

Malta's Presidency of the EU and childhood obesity

Malta reported on its Presidency of the Council of the European Union, which placed childhood obesity as one of the focal areas. The EU Action Plan on Childhood Obesity provides a basis for Member States to develop their policy on tackling childhood obesity. A mid-term evaluation of this action plan, conducted during Malta's presidency term, showed that Member States are most active in the area of supporting a healthy start in life (area 1), promoting healthier environments (area 2) and encouraging physical activity (area 6). On the other hand, there was limited or no activity in the area of labelling and taxation (area 3), marketing (area 4) and informing and empowering families (area 5).

The Maltese Presidency put forward a set of Council conclusions to contribute towards halting the rise in childhood obesity. These Council conclusions invite Member States to integrate in their national plans, cross-sectoral actions aimed at tackling childhood obesity. These focus on governance, tackling drivers and maximising protective factors, focus on educational settings, family-based approach, reduction of health and social inequalities, improvement of food products, early interventions, breastfeeding, dietary guidelines, training of health professionals, screening and management of overweight and obesity, and measures to reduce exposure to marketing. They also call for an intersectoral approach through health in all policies, labelling of foods and legislative measures where appropriate. There is need for improvement of collection of data on health indicators, interventions and actions, protective and risk factors, overweight and obesity and health outcomes. These Council conclusions support surveillance initiatives, such as WHO's Childhood Obesity Surveillance Initiative (COSI) and the Health Behaviour of School-aged Children (HBSC), and good practice dissemination.

These Council conclusions recognise that a cooperative cross-sectoral approach should be taken across government and whole of society to ensure healthy environments, including health, education, food production, agriculture and fisheries, commerce and industry, finance, sport, culture, communication, environmental and urban planning, transport, social affairs and research.

Malta is looking forward to the adoption of these Council conclusions by the Ministers responsible for health at the EPSCO Council in mid-June and to the ongoing coordination of actions across Member States.

Intersectoral approach to NCDs in Montenegro

Montenegro reported on its intersectoral approach to tackling the epidemic of NCDs, which has been recognized as a public health challenge and a development obstacle. According to the latest available data for 2010-2013, chronic diseases account for 80% of overall mortality.

While being focused on improving health and well-being, reducing health inequalities, strengthening public health and ensuring the sustainability of health systems, the National Health Policy Framework, inspired by Health 2020, promotes a whole-of-government and whole-of-society perspective. Furthermore, the 2016 national strategy on sustainable development recognizes prevention and control of NCDs as an outcome and indicator of all three dimensions of sustainable development. The Montenegro Government has established the National Council for NCD Prevention and Control, chaired by the Prime Minister, and set national targets on NCDs.

A national initiative on reducing daily intake of salt—developed jointly, with WHO technical assistance, by the ministries of health and agriculture with the bakery industry—reached consensus to regulate a minimum salt content in bread and bakery products.

Generally, the overall environment in Montenegro should be more supportive of healthy choices and behaviours. This undertaking requires broad alliance and action to promote policy coherence across sectors and businesses to do more on issues including food reformulation, consumer information, responsible marketing and promotion of healthy lifestyles.

In Montenegro, the private sector is heterogeneous and influences chronic diseases positively but also through the sale of harmful goods, as well as lobbying and marketing activities. With globalisation this influence will grow stronger. Partnership with the private sector, with the exception of the tobacco industry, could be a game changer. Smart models for engagement with businesses to mitigate harm and leverage expertise and resources to bolster the sustainable NCD response are needed. Sub-regional platforms for collaboration, such as the South-east European health network, should be utilized to scale up benefits of 'unlocking transformative powers of private sector'.[6] Statutory and regulatory frameworks that support partnerships and protect public health from undue commercial influence will play an essential role in this process. Collective efforts to maximize use of resources are particularly important in small countries, where the challenges are large but not unsurmountable.

Tobacco control in Romania

Romania reported on major advances in tobacco control. The country recorded the biggest recorded positive jump for a Member State on the European Tobacco Control Policy Scale, by moving up 12 places to 7th position between 2013 and 2016. A tobacco control programme combined a ban on smoking in public places, implementation of the EU Tobacco Products Directive, initiation of debate and legislative changes. This programme has been possible

[6] United Nations General Assembly. A/RES/69/313. Addis Ababa Action Agenda of the Third International Conference on Financing for Development. 2015

because of effective collaboration between the government, civil society and medical professional bodies, as well as support from European and international institutions.

This collaborative approach is reflected in the unprecedented level of public support, with more than 85% of the population viewing tobacco control measures favourably. Romania, therefore, has become one of the leading countries in prioritizing the fight against tobacco.

Tobacco control in Slovenia

Slovenia reported on a new campaign initiative on tobacco control. Despite having banned smoking in public places 10 years ago, smoking prevalence increased over the last five years. A wide coalition of NGOs, health professional bodies, the Ministry of Public Health and other agencies came together and set out a number of goals, including to introduce plain packaging, to restrict access, completely ban marketing and increase taxes.

Not all of the goals have been achieved yet. The plain packaging proposal has generated the most debate, with concerns about the possible impact on illicit trade. Ultimately, however, the arguments were successful and plain packaging legislation has been fully adopted. In addition, legislation has been issued to regulate e-cigarettes and herbal cigarettes. A total ban on marketing has been implemented and licensing has been introduced for tobacco vendors. In addition, some tobacco tax revenue has been earmarked for public health purposes.

Further progress is still needed. The proposals to increase taxes and to restrict the number of vending outlets near schools or places where young people congregate were not adopted.

Discussion
All the contributing Member States were congratulated on their efforts, demonstrating innovation, resilience and, above all, tenacity.

There was some discussion about whether partnerships or collaboration with sports industries (e.g., sports equipment or clothing brands) would be appropriate for health agencies. The sports sector has been very effective in promoting health messages, particularly after public sector funding replaced tobacco sponsorship, so there could be scope to work with this sector. However, there is *always* a need to carefully consider how a private sector entity could influence health policy outcomes, irrespective of the type of industry. Partnerships with gyms and fitness centres, for example, could create a conflict of interest diverting attention from the need to develop public spaces for physical activity.

As well as helping consumers to choose healthy food products, it was suggested that the front-of-pack labelling system developed in France could potentially be very useful for taxation policy, with green-labelled foods having preferential tax rates. This labelling scheme also provides answers to the often-posed question ‘what is a healthy food’?

Innovation and information

Ms Tatyana Migal, Ministry of Health of the Republic of Belarus, set the scene for the fourth plenary on innovation and information.

She also provided a brief resume of the many actions on NCDs implemented by Belarus, with technical assistance from WHO, in recent years. A state programme on public health and

demographic security has been adopted, with a life-course approach and including aspects relating to quality of life. An inter-agency council to reduce tobacco an alcohol use, prevent NCDs and promote healthy lifestyles has been established. In addition, communication activities include a website on healthy lifestyles. Development of an information strategy on the promotion of healthy lifestyles has established ground rules for interaction with mass media.

Towards a joint monitoring framework: the space for ambition

Dr Claudia Stein, WHO Regional Office for Europe, provided an overview of the arrangements for monitoring progress towards the NCDs targets and a proposal to ease country reporting.

The two key frameworks in the European Region—Health 2020 and the Sustainable Development Goals—are very well aligned. In fact, 76% of the indicators in the Health 2020 are fully aligned with those in the SDGs. There are many areas of overlap relating to NCDs, including alcohol, mortality and smoking. In addition to these two frameworks, there is the Global Monitoring Framework on NCDs with nine global targets for 2025 and 25 indicators. There is considerable overlap between the three frameworks, with the themes of at least 10 indicators featuring in all three frameworks.

At the Regional Committee in September 2016, the WHO Regional Office for Europe provided a technical briefing on the areas of overlap between monitoring frameworks. Member States requested that a core set of indicators, common to all three frameworks, be developed in order to reduce the reporting burden.

A process for defining a core set of indicators has recently been proposed to Member States and the subject of an online consultation and a consultation meeting. Five options for a joint monitoring framework were put forward:

1. To produce a streamlined **core set of indicators** common to all three frameworks
2. Streamlined **timing** for reporting
3. WHO Regional Office to merge and streamline **requests** for data
4. Combination of options (1) and (2)
5. Combination of all options.

Consultation participants were asked to state their preferred option, as well as to outline potential challenges, possible benefits and suggestions for support from the Regional Office. The responses clearly identified considerable support for the idea of a core set of indicators (Option 1), sometimes combined with streamlined timing for reporting (Option 4) or with streamlined timing and minimized data collection (Option 5).

Currently, therefore, discussions with Member States are ongoing. If the Regional Committee in September 2017 decides to go ahead with development of a joint monitoring framework, an expert group will be constituted and a core set of indicators should be proposed to the Regional Committee in 2018 to create the first joint monitoring framework.

WHO will report data to the UN monitoring process, but will also disseminate data more widely. The new gateway (gateway.euro.who.int) is also available as a mobile application and incorporates a new tool to facilitate exploration of health data in the European Region. A series of country reports have been published, reporting on progress towards the Health 2020 and other goals. The regional quarterly journal, Panorama, aims to disseminate good practices and

successful implementation of evidence-informed policies. All these activities are coordinated under the umbrella of the European Health Information Initiative, which brings together 34 Member States and institutional partners.

Innovative approaches to epidemiology and NCDs: a public health of consequence

Dr Sandro Galea, Boston University, United States, provided an overview of a conceptual, data-informed approach to a public health framework.

Often the efforts of the public health community fail to see the whole picture and focus too much on the more visible or easily discernible determinants of health. In other words, focusing on more palpable elements—namely, behavioural and lifestyle factors–resulting in a plethora of advice to populations on smoking, drinking, exercise and diet rather than structural approaches that help nudge people towards healthier behaviour.

A review of reviews examining the efficacy of programmes advising people not to smoke, found that just under half (48%) of the reviews were favourable in the short-term (1-2 years). When long-term effects were examined, only about 4% of the reviews were favourable (favours treatment), while no long-term data were available for 61% of the reviews. Similarly, for physical activity, the majority (61%) of reviews on advising people to do more physical activity favoured treatment in the short term, while in the long term only 19% of the reviews were favourable and no long-term data were available in 67% of cases. This means that public health efforts are not informed by data demonstrating that they make a difference.

There are two core challenges:

- Misunderstanding of population health: It is important to bear in mind that the goal is to improve NCDs in the *whole* population and not only a sub-set.

- Over-simplification: NCDs and conditions like obesity have complex causal webs. Mechanisms such as provision of health advice are ultimately going to be insufficient to improve population health unless the underlying conditions are tackled.

A number of principles can be set out:

1. Population health manifests as a continuum.
2. The causes of differences in health across populations are not necessarily an aggregate of the causes of differences in health within populations.
3. Large benefits to population health may not improve the lives of all individuals.
4. The causes of population health are multilevel, accumulate throughout the life course, and are embedded in dynamic interpersonal relationships.
5. Small changes in ubiquitous causes may result in more substantial change in the health of populations than larger changes in rarer causes.
6. The magnitude of an effect of exposure on disease is dependent on the prevalence of the factors that interact with that exposure.
7. Prevention of disease often yields a greater return on investment than curing disease after it has started.

8. Efforts to improve overall population health may be a disadvantage to some groups; whether equity or efficiency is preferable is a matter of values.
9. We can predict health in populations with much more certainty than we can predict health in individuals.

Principles 1 and 3 are particularly important to remember for population-level approaches to prevention and control of NCDs. The global goals will not be achieved by only targeting the high-risk groups or by only providing advice. Commitment to achievement of the SDGs needs, rather, to combine a high-risk approach with structural population-based approaches. It is also important to overcome biases and this means recognizing the tendency to focus on elements that are most visible or palpable. The two approaches—structural aspects and tackling determinants—need to be combined if the targets that the global public community is working towards are to be achieved.

Health care analytics and management: data as a determinant of effectiveness

Professor Ran Balicer, Clalit Research Institute, Israel, presented how data analytics can be used for NCD management.

NCD prevention and control faces a number of challenges, mainly due to lack of information. Visibility on current NCD trends is lacking, with treatment being offered too late in the disease course and care provided for one disease at a time. In addition, it is not always clear which interventions really work and expensive futile care is sometimes provided, while patients get lost between care silos. Furthermore, patients may ignore or refuse medical advice. As a result, the picture of the way ahead is often blurred. This a particularly unique time of opportunity, since there are many options available to help clarify that picture.

One option is use of electronic health records, which can help to improve surveillance, risk stratification and provision of effective care. A few countries in the European Region are now implementing electronic health records, and these records can help achieve the visual acuity needed to make the way ahead clearer.

A Technical Meeting of the WHO European Region identified problems with current surveillance for NCD trends and the need for new NCD surveillance tools. Data from electronic health records in Israel, for example, has enabled identification of rising prevalence of chronic kidney disease and provided data on the relative risks by number of risk factors and age. The majority of the Israeli population have at least two of the five risk factors that are strongly associated with risk of kidney disease.

Electronic health records can also help with risk factor stratification to enable more proactive prevention, including by identifying sub-groups most amenable to prevention activities.

In relation to treatment, electronic health records can help in the setting of treatment targets. Analysis of data from e-health records, for example, can be used retrospectively to examine the impact of very low levels of LDL-cholesterol or low blood pressure, in order to set realistic targets for individuals. This allows for personalised recommendations on an individual basis and, importantly, could reduce over-treatment and over-diagnosis thereby potentially releasing more funds for NCD prevention.

There are four elements that need to be adopted by any forward-looking system for NCD prevention and control:

- Adoption of electronic health records
- Data integration and analytics
- Re-training of public health teams (to use the electronic systems)
- Ensure that data translates into action, through staff feedback mechanisms.

International collaboration—and sharing of experience with innovative data-driven approaches—will be key. Israel, for example, has introduced electronic health records within a decade and with relatively little funding and investment. This demonstrates that it can be done and fits well with the message spelled out at the beginning of the meeting—the lessons and technology of today can be used to tackle the burdens of the past and achieve gains for the future.

NCD interventions as natural experiments: new tools for planning and evaluation

Professor David Stuckler, Bocconi University, Italy, described how natural experiments can be used to help plan and evaluate interventions.

Population health is about more than health care—the communities where we age, live, work and play have a powerful effect on health. Data collection is tremendously important for tackling the NCD challenge because, as WHO Director-General Dr Margaret Chan has said repeatedly quoted, '*what gets measures gets done*'.

The public health community is currently working towards the 25 by 25 approach for a 25% reduction in NCDs by 2025. Less well known is the 1 x 25 figure, which reflects that only one in 25 NCD programmes or interventions are being seriously evaluated. The last critical step of policy implementation—evaluation—is too often ignored. Even flagship policies, such as the Framework Convention on Tobacco Control, are not fully evaluated—it is not clear how may lives have been saved by implementation of the Convention.

There is, however, a new way forward, being spearheaded by WHO and the Collaborating Centre at Bocconi University. This is the use of natural experiments to evaluate population health interventions. This approach is as old as epidemiology itself, dating back to John Snow's experience controlling cholera in mid-19th century London. A number of authoritative bodies are now recommending use of natural experiments to evaluate initiatives.

In one example, the US city of Berkeley decided to use a natural experiment design to test the impact of a sugar tax on the consumption of sugar-sweetened beverages. This involved measuring the impact in neighbouring San Francisco and Oakland, where no tax was introduced, as well as in Berkeley where a penny-per-ounce tax was introduced. They were able to show a 21% drop in sugar-sweetened beverages and a 63% rise in water consumption *(7)*.

In another example, a randomised social experiment examined pilot studies on policies in the US between 1994 and 1998 to mix social housing into wealthier neighbourhoods, by splitting the population into groups that were randomised. The researchers found, when they followed up

between 2008 and 2010, that the risk of obesity and diabetes dropped substantially when people moved into less poor neighbourhoods compared to those that stayed in more deprived areas *(8)*.

Some people argue that only RCTs allow causal inferences to be drawn. However, it is not always practical, ethical or realistic to conduct RCTs, particularly in relation to risk factors such as tobacco, alcohol and unhealthy diet.

In May 2017, a WHO short course on natural experiments for NCD evaluation was held, in order to facilitate sharing of tools and techniques. Currently, a series of natural experiments is underway to assess NCD interventions such as tobacco control and trans fats legislation. A similar course will be offered in Copenhagen.

In conclusion, natural experiments are happening constantly and the health sector could take advantage of these to learn and, in doing so, transform European public health.

Discussion
There was some discussion about the extent of integration needed for electronic health records. Do they have to be integrated at the national level? Or can each facility have its own system? There was clarification that either option is possible, but that it is important that there is some inter-operability or harmonization which means that data be integrated and analysed. Authorities should issue a recommendation or a regulation on how data is to be collated between or within organizations. As use of electronic health records expands there will be less need for external resources such as specific disease registries.

Lessons from countries

Dr Enrique Loyola, WHO Regional Office for Europe, invited countries to share their experience in relation to innovation and information. There is a clear need for efficiency in both data collection and is using data to produce information. More progress is needed in the Region and there are new tools available—from electronic health records to natural experiments—that could help bring about improvements.

Risk factor monitoring for NCD reduction in Finland

Finland reported on 40 years of experience using information to tackle NCDs. In the late 1960s and 1970s Finland had the highest CVD mortality in the world, with markedly higher prevalence in men and in the east of the country. In 1972, the North Karelia project, a bottom-up population-based prevention project, started, mainly implemented by existing community organizations with active participation by the health system. There was also an element of a high-risk approach, when needed. At that time, prevalence of smoking, hypertension and high cholesterol was very high in Finland, and the main initial focus was on behaviour change. Risk factor monitoring was started in 1972 and has been repeated every five years since then.

Premature mortality reduced dramatically among both men (82%) and women (84%) between 1969-72 and 2012. It is interesting to note that it has taken men 40 years of declining mortality to reach the same level of mortality as that of women in 1972. The data collected on risk factors enabled analysis of how much of the 80% reduction could be explained by the respective risk factors. In 2012, around two thirds of the reduction in mortality in the previous 10 years can be explained by primary prevention focusing on three risk factors (smoking, systolic blood pressure, cholesterol) and the remaining third by ‘other factors’ (other risk factors, secondary prevention

and treatment) *(9)*. This study shows very clearly the power of primary prevention and of maintaining a population-based approach. Secondary prevention and treatment can bring additional benefits.

The STEPwise approach to surveillance in Georgia

Georgia reported on NCD surveillance efforts in the country. NCDs are responsible for nearly 94% of all deaths, with a major impact on health and progress towards the SDGs.

Timely access to reliable information is essential to monitor the impact of NCD interventions. Georgia implemented, therefore, the WHO STEPwise approach and conducted two rounds of STEPS surveys in 2010 and 2016, with WHO's support. This allows comparison with other countries and monitoring of NCD and risk factor trends.

Based on the information provided by the STEPS, surveys a multisectoral council on NCD prevention and control was established, a national strategy and action plan has been endorsed and adjustments made to the universal health care programme (e.g., access to essential NCD medication). The data on risk factors is extremely important for projections on the future burden and to identify potential interventions. Georgia is maximising efforts to obtain information on risk factors by using a variety of survey tools and registries, in collaboration with WHO and other organizations. NCD and risk factor surveillance, therefore, has great potential to orient both primary and secondary prevention and management.

NCD risk factor surveillance in Italy

In the last 10 years, Italy has implemented a national surveillance system that provides useful information for all stakeholders. Analysis of the data collected allows monitoring of trends in main behavioural risk factors, and, in some cases, allow comparisons with other countries.

The NCD risk factor surveillance system is composed of different elements of surveillance. Main health data is also collected by the National Statistics Institute. The innovation of the surveillance system is the ability to get data on key health determinants, on adoption of prevention measures and to build specific databases at the regional and local levels. This enables, in turn, planning based on relevant data.

The main surveillance systems are PASSI for 18 to 69 year olds, PASSI D'Argento for those over 69 years, Okkio alla Salute for children aged 8 to 9 years, HBSC for adolescents, and the Global Adult Tobacco Survey. The PASSI system, based on the US Behavioural Risk Factor Surveillance System, collects crucial information related to the onset of NCDs from a representative sample using a standardised questionnaire administered by telephone interview. PASSI has proved to be a very flexible tool, and has also been used in emergency situations following recent natural disasters or flu epidemics. In addition, it enables monitoring towards progress towards the NCD targets and is funded in a sustainable way.

Addressing NCD risk factors in the Russian Federation

Maximum efforts to address risk factors, in line with implementation of the SDGs, are underway in Russia. These include adoption of a strategy for health care development until 2030, under the leadership of the Minister of Health. Another strategy, on building healthy lifestyles and prevention and control of diseases until 2025, is under discussion. This strategy is based on the intersectoral approach and the input of other agencies is welcome.

There are a number of principal directions for this strategy:

- Reduce risk at the population-level
- Healthy lifestyles—improving motivation and creating conditions for healthy lifestyle
- Reduce proportion of individuals at high-risk, through detection and control
- Prevent complications in people with NCDs through active monitoring, screening etc.
- Active prevention and proper NCD management in specialist care

Development of a strong three-tier health system is ongoing. Clinical protocols and guidelines are being standardized across the Russian Federation. Well-equipped centres have been established and widespread screening is provided across all regions of the Federation. Together, these measures have enabled good progress to be achieved. There are still some concerns, however, about a slowing down in the decline in mortality and the root causes of this are being explored. Nonetheless, the Russian Federation is committed to continuing this approach and to working collaboratively with the rest of the European Region to achieve the SDGs.

Addressing NCDs in Germany

With NCDs very high on the political agenda, Germany has adopted several approaches that address major NCDs and their shared risk factors encompassing the areas of health promotion, prevention, provision of care, surveillance and research. For example, in Germany a wealth of different measures and projects are organized by the federal authorities, Lander, communes and civil society to counteract poor eating habits, physical inactivity, overweight and the related diseases. For example, IN FORM is a national action plan for the prevention of poor dietary habits, lack of physical activity, overweight and related issues. Healthy school meals are also one of the priorities, and issues such as excess alcohol intake, tobacco use and risks of hypertension are also being addressed. Germany has also initiated a national diabetes awareness campaign.

In the future, Germany will continue to work towards the prevention and control of NCDs. Instead of focusing solely on disease-specific interventions, special emphasis will also be on general approaches addressing major chronic diseases, taking into account shared risk factors and comorbidities. The Federal Ministry of Health lays special store by the improvement of prevention and high-quality care in Germany as cross-sectional issues. Future goals will comprise continuing with a high quality prevention-oriented healthcare system by, for example, further developing nationwide health monitoring systems, ongoing support of national registries, including development of a national diabetes monitoring system (as a prototype for other NCDs). While doing all this, a patient-centred approach is being followed, such as improved access to psychosocial care for cancer patients and their relatives and an emphasis on effective communication in the physician-patient-relationship, both topics being key objectives of the German National Cancer Plan. A new Alliance for Health Competence has been established in order to provide people with high-quality, evidence-based, trustworthy and independent health information. This should help them to make healthy choices and to learn about individual lifestyle interventions, while also strengthening patient autonomy.

Feedback to the global expert meeting: towards accelerated achievement in the WHO European Region—inspiration for the global roadmap

Via remote link, feedback on the context and findings of the meeting was transmitted to the global expert meeting working on development of the roadmap towards 2030.

Dr Galea set the overall context, the plenary session chairs summarised the main outcomes of each session and Dr Chestnov concluded.

Almost all of the 53 Member States of the European Region have declining NCD mortality and this applies to all sub-regions and across all income groups of the Region. Despite the overall decline, there are major differences within the Region and between men and women. Examination of recent trends has identified two major challenges. The first is to remove the excess mortality of males in the eastern part of the Region. The second is to remove the excess mortality due to cardiovascular diseases, which is also much higher in eastern Member States. These two areas provide entry points to facilitate reaching, and even exceeding, the global target.

One of the areas that may be generalizable to other parts of the world is the issue of gender. This is related to many of the behaviours leading to excess mortality in males. There is a strong case for considering gender to be a major social determinant of NCDs, which probably has similar modifiable influences in other regions.

Closer examination of progress towards the nine global targets reveals good progress towards the mortality and hypertension targets, but *huge* scope for further progress on the other targets. The importance of increasing investment in the 'best buys' has been recognised. The potential health gains from taxing tobacco and alcohol are considerable, and pricing policies are recognised to be among the best buys for the Region. Similarly, much further progress is possible on hypertension, particularly through prevention and clinical preventive work.

In summary, the meeting focused on a number of key areas:

- The decline in mortality
- The importance of masculinity
- The excess mortality from cardiovascular disease
- Identification of taxation and tackling hypertension in health systems as key policy responses
- Exploring more radical ways of dealing with commercial determinants and innovative approaches to using information for planning, interventions and surveillance.

The main message from the taxation plenary is that taxation works—it is one of the most powerful tools available to reduce consumption of tobacco products and alcohol, and particularly to delay initiation into use of these products among young people. There remains a significant opportunity to fully exploit these tools by more effective taxation between now and 2030. Key recommendations are to build broad consensus and coalitions to counter industry influences, to use economic arguments in discussion and negotiation with other sectors of government, to provide more support for Member States and to use existing evidence as well as building new evidence in other areas (such as taxing sugar-sweetened beverages, earmarking taxation revenues for health goals). Furthermore, considering the progress that has already been achieved, the

European Region should consider committing to a more ambitious target of 45% reduction in premature mortality by 2030.

The plenary session on hypertension noted the progress made as overall the Region is on track to achieve the target of reducing hypertension by 25%, but acknowledged emerging geographical and gender differences within the Region. The salt/sodium target is unlikely to be met and there are variations in ascertaining risk levels and in use of medication. The evidence base is clear, but multisectoral programmes are required for implementation. The focus needs to be on structured, integrated care, with a key role for primary care. In addition, self care needs to be supported. For the salt target, salt reduction strategies are important and reformulation can play a key role, but industry needs to be held to account. The important role of NGOs—in advocacy and support—was highlighted, as was the importance of health ministries being able to articulate the economic case for action. It is vital that Member States share and exchange their experience, and this could provide a counterweight to industry relationships with economic/finance ministries. The targets can be met, or even exceeded, but this will require a range of measures on prevention and management, which need to be integrated together.

The session on commercial determinants of health, agreed that such determinants have become more important than ever. The session examined possible interactions between governments and/or the public sector with different stakeholders, namely the private sector. Issues around whether there should be any interaction and, if so, how it can be beneficial for health were explored. The challenge is to establish clear principles—rather than drawing up conflict of interest rules on a case-by-case basis—and to establish arm's length separation between public and private sectors as the default. There are many lessons to be learned from the decades-long fight with tobacco, highlighting the need to build on success, confront the opposition and 'stay with it' over time. An example of good practice, from France, showed how use of good evaluation protocols, accepted by different stakeholders, could lead to change—in this case, adoption of a new front of pack nutrition labeling scheme. Economic data, including cost-effectiveness analyses, is important, as is the need to understand that within governments there are differing interests and views. Opportunities and options for collaboration were highlighted, notably when entering into negotiation with different stakeholders. Country experience highlights the importance of balancing collaboration with regulation in the field of diet and nutrition, leadership in the area of childhood obesity, and brave and powerful action on tobacco.

The plenary session on innovation and information highlighted the need to use alternative methods for monitoring. Only around one third of European Member States have conducted STEPS studies, and many countries that do have resources available have not done so. It is critically important to have the data available, but also that the data are used and information disseminated. Use of electronic records should enable capacity to be increased, while decreasing costs. In order to achieve the targets it will be critical to improve epidemiological surveillance. Furthermore, NCD risks should be stratified and, finally, specific measures need to be designed for each individual country on how best to tackle premature deaths.

The session on open discussion and working groups identified participants' suggestions of key actions needed in the country context and of ways in which the European Region can be more ambitious in reducing the NCD burden. There is a convergence of understanding that countries throughout the Region face the same problems, experience similar constraints and take on the same challenges. Nonetheless, the ranking of the problems may vary between countries, and possible solutions may differ depending on, for example, the maturity of the system, the legal framework, public opinion and strengths of the system. Responses highlighted some particular

areas that need attention, including use of predictive use of epigenetics as part of a life-course approach to tackling NCDs, improving understanding of the link between preventive actions and morbidity reduction, the impact of curative services on reducing mortality and enhancing understanding of the role of physical activity.

In relation to the answers to the questions put to participants, many concerned systemic aspects—such as improving governance, strengthening political will, establishing firm leadership and reinforcing public health infrastructure. The critical need for health-in-all-government and health-in-whole-of-society approaches in order to tackle commercial determinants of health was clearly identified. In relation to legislation, there was heavy emphasis on taxation and price policies, as well as labelling and reducing portion size. Infrastructure elements that were highlighted were strengthening human resources and the need for platforms to enable exchange of experience, best practice and innovation, with a focus on action. Responses also highlighted the need to improve surveillance, establish monitoring and evaluation based on solid data and the need to identify targets for actions and for particular groups. Finally, the need to develop and exchange harmonized data systems, raise public awareness and improve the health literacy of the public were also issues highlighted.

There are a number of balancing acts that need to be performed to optimise the processes involved in defining a roadmap towards 2030. First, there is a need, for example, to balance what is theoretically possible, according to experts, with what is possible in practice, according to people on the ground. Second, the correct balance between prevention and care has to be found, a long-standing challenge for NCD control. The third balance refers to the relationship between governing bodies and executive management—management has to support governance in its decision-making. Furthermore, there is a need to find the correct balance between long-term planning and emergency response—in some countries, for example, obesity is already a public health emergency, thus health systems need to respond now. Finally, there is a need ensure that the public health community's dreams and expectations are well balanced with reality. These are issues to take into account as the roadmap towards 2030, and the new milestones, are defined.

In light of current progress, the Member States of the European Region are considered setting a more ambitious target to reduce premature mortality by 45% by 2030.

Some conclusions from the Geneva meeting on *The NCD Challenge—current status and priorities for state action* were conveyed via a remote link.

These conclusions were fed into the *WHO Global Conference on Noncommunicable Diseases* in Montevideo between 18 and 20 October 2017. In the resulting outcome document of the Conference, the *Montevideo Roadmap 2018-2030 on NCDs as a Sustainable Development Priority*, participating governments pledged to take bold action and accelerate progress to, by 2030, reduce by one third the premature mortality from NCDs by:

- Reinvigorating political action;
- Enabling health systems to respond more effectively to NCDs;
- Increasing significantly the financing of national NCD responses and international cooperation;
- Increasing efforts to engage sectors beyond health;
- Reinforcing the role of non-State actors;

- Seeking measures to address the negative impact of products and environmental factors harmful for health and strengthen the contribution and accountability of the private sector and other non-State actors;
- Continuing to rely on WHO's leadership and key role in the global response to NCDs; and
- Acting in unity.

Closing session

Dr Oksana Drapkina, National Research Centre for Preventive Medicine, Russian Federation, thanked participants for a very fruitful collaboration and underlined the importance of this kind of exchange of experience. It is now clear that it is possible to reduce NCD mortality and there is much better understanding of how to fight against risk factors. The challenge is now to translate the excellent examples shared at the meeting into action in other countries.

Dr Chestnov added his thanks to participants for the very rich discussion that will be disseminated to other Regions and thanked everyone involved in the planning and logistics.

Dr Galea also conveyed his thanks to the Russian Federation for hosting, to Member States and other participants for their enthusiastic participation and for sharing their success stories, to the speakers for their inspiring contributions and to the entire WHO team for their hard work in organising the meeting.

Finally, Dr Vujnovic added her thanks and drew the meeting to a close.

Annex 1

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