

Permanent Conference on Czech Healthcare  
International Panel

# The Economics of Prevention

Summary of Presentations  
(Prague, 22 July 2021)



**Permanent Conference**  
on Czech Healthcare





## About the Permanent Conference

The Permanent Conference on Czech Healthcare is a project initiated by Zdravotnický deník. As such, it aims to introduce and stir discussion on key issues connected to the health system and, in a broader term, the state of public health in the Czech Republic. The conference participants include leading experts from both the Czech Republic and abroad as well as policy makers and the representatives from the ranks of public service and public health institutions. The overall driving spirit behind the project is to help devise solutions to long-term problems of the healthcare system and serve as an open forum interconnecting both the expert and public debate.

The Permanent Conference takes form of successive expert and political panels with both Czech and international participation. Within the expert panel, leading capacities introduce latest scientific insights and global trends, while putting forward an array of possible solutions or improvements to the existing problems and deficiencies with the health sector. Their recommendations are used as a basis for a subsequent debate of policy makers as part of the political panel. The conclusions of the conference are made public and available for the use of other media as well as expert institutions and bodies.

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**Andrej Babiš,**  
Prime Minister, Czech Republic



**Adam Vojtěch,**  
Minister of Health, Czech Republic



**Vladimír Lengvarský,**  
Minister of Health, Slovakia



**Zdeněk Kabátek,**  
Director, General Health Insurance  
Company, Czech Republic



**Viktor Mravčík,**  
Head of the National Monitoring  
Centre for Drugs and Addiction,  
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**Reuven Zimlichman,**  
Head of Cardiovascular Research  
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**Aleš Linhart,**  
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**Andrzej Mariusz Fal,**  
President of the Polish Society of  
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Hospital, Warsaw, Poland



**Richard Raši,**  
Deputy and Member  
of the Health Committee  
of the Slovakian National Council,  
Former Minister of Health, Slovakia



**Anna Záborská,**  
Vice-Chair of the Health  
Committee of the Slovakian  
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**Michal Vráblík,**  
President of Czech Society  
of Atherosclerosis, Czech Republic



**Jana Prausová,**  
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Oncology, Head of the Department  
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of Charles University and Motol Faculty  
Hospital in Prague, Czech Republic



**Petr Winkler,**  
Director of National Institute  
of Mental Health, Czech Republic



**Zdeněk Hamouz,**  
Founding Member of Association  
of General Practitioners,  
Czech Republic



**Zorjan Jojko,**  
Head of Association of Outpatient  
Specialist, Czech Republic



**Barbora Macková,**  
Director of National Institute  
of Health, Czech Republic



**Ivan Duškov,**  
Deputy Director, General Health Insurance  
Company, Czech Republic

# Permanent Conference on Czech Healthcare International Panel on the Economics of Prevention

focusing on oncological and cardiovascular diseases in relation to smoking, alcohol and mental health organized under the auspices of Andrej Babiš, Prime Minister of the Czech Republic

Date:	Venue:	Languages:	Live stream:
22 July 2021	Kaiserštejnský palác, Malostranské nám. 23/37, Praha 1	Czech Slovak English	<a href="http://www.zdravotnickydenik.cz">www.zdravotnickydenik.cz</a> <a href="http://www.ceskenoviny.cz">www.ceskenoviny.cz</a> <a href="http://www.idnes.cz">www.idnes.cz</a> <a href="http://www.tasr.sk">www.tasr.sk</a> <a href="http://www.teraz.sk">www.teraz.sk</a>

## Programme

**14:45 – 17:15**

### Priorities of the Czech Ministry of Health in the field of prevention

Adam Vojtěch, Minister of Health, Czech Republic

### Priorities of the Slovak Ministry of Health in the field of prevention

Vladimír Lengvarský, Minister of Health, Slovakia

### The public impact of addiction and evidence-based policy

Viktor Mravčík, Head of the National Monitoring Centre for Drugs and Addiction, Czech Republic

### Cardiovascular risk factors: An evidence-based approach. The key to reduce the burden of cardiovascular diseases

Reuven Zimlichman, Head of Cardiovascular Research Institute, Sackler Faculty of Medicine, Tel-Aviv University, Israel

### Cardiovascular diseases and prevention

Aleš Linhart, President of the Czech Society for Cardiology, Head of the Department of Cardiology and Angiology, First Medical Faculty of Charles University and General University Hospital in Prague, Czech Republic

### The economics of prevention: Effective financing in the times of rising health expenditure due to demographic and technological development

Andrzej Mariusz Fal, President of the Polish Society of Public Health, Head of the Department of Allergology, Lung Diseases and Internal Medicine, Central Clinical Hospital of Ministry of Interior in Warsaw, Poland

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**Responsibility of the government and its active role in health risk prevention measures**

Andrej Babiš, Prime Minister, Czech Republic

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**Economic incentives as triggers of behavioural change and prevention funds of public health insurance companies**

Zdeněk Kabátek, Director, General Health Insurance Company, Czech Republic

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**The economics of prevention and responsibility of the Parliament**

Richard Raši, Deputy and Member of the Health Committee of the Slovakian National Council, Former Minister of Health, Slovakia

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## Coffee Break

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**17:30 – 19:00**

**The role and impact of prevention in healthcare**

Anna Záborská, Vice-Chair of the Health Committee of the Slovakian National Council, Slovakia

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**Atherosclerosis and prevention**

Michal Vráblík, President of Czech Society of Atherosclerosis, Czech Republic

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**Oncological diseases and prevention**

Jana Prausová, President of the Czech Society for Oncology, Head of the Department of Oncology, Second Medical Faculty of Charles University and Motol Faculty Hospital in Prague, Czech Republic

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**Prevention in mental health**

Petr Winkler, Director of National Institute of Mental Health, Czech Republic

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**Prevention in primary care**

Zdeněk Hamouz, Founding Member of the Head of Association of General Practitioners, Czech Republic

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**Prevention in outpatient care**

Zorjan Jojko, Head of Association of Outpatient Specialist, Czech Republic

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**Prevention in public health protection**

Barbora Macková, Director of National Institute of Health, Czech Republic

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**Prevention funds of public health insurance companies**

Ivan Duškov, Deputy Director, General Health Insurance Company, Czech Republic



Photo: Radek Čepelák

# Foreword

The WHO estimates that so far 4.5 million people have fallen victim to the covid-19 pandemic, one of the most serious health crisis of the last century. Non-communicable diseases, such as cardiovascular and oncological diseases, diabetes or pulmonary diseases, lead to 41 million deaths every year. Alas, in both cases the numbers are too high as in both cases these deaths could have been prevented to a great extent.

Nevertheless, it is the non-communicable diseases that are behind almost 70 percent of all global mortality despite catastrophic consequences of the current covid-19 crisis. Mortality, the major portion of which might have not happened at all. The Czech Republic, which ranks high in international statistics concerning smoking and alcohol consumption, is no exception. From my point of view, it is a rather alarming situation. This is the reason why promotion of prevention and primary care has always been one of the supporting pillars with which I assumed my office as minister of health. I keep repeating that every euro invested in prevention saves many euros for subsequent therapies. Therefore, I am very happy that the “economics of prevention” has its own conference where I had the honour to give the introductory presentation.

On the other hand, it is also true that many of the preventive measures adopted so far in order to minimise the risk of non-communicable diseases have reached its maximum potential. Looking back at the past decades, our lifestyle has improved, yet the potential of further improvement in health of our citizens has thus been exhausted to a certain extent. If we want to continue in the current positive trend, we have to look for new approaches and new opportunities, too.

An example of such a new opportunity could be the reduction of risks of harmful behaviour. In most cases, non-communicable diseases are caused by harmful behaviour linked with addiction. A complex harm reduction strategy has to include all tools available. Not only that we need public education and effective restrictions in the form of legislation and rules, but we should also try to reduce the negative impact of such behaviour on human health. The discussion of experts from the Czech Republic and abroad at this conference showed us the way forward.

Prevention as well as other necessary steps is also an important issue for health insurance companies. They should become the principal partner in the debate on suitable incentive tools that could improve the attitude of our citizens to their own health.

It is not an easy debate and it has been taking place in other countries as well. Presentations that were delivered at this conference are more than a valuable contribution to it. No doubt that we all who have the health of our citizens in our hearts have something to think about.

I wish you all good health.

Yours,  
Adam Vojtěch  
Minister of Health of the Czech Republic

# **We Are Facing a Pandemic of Lifestyle Diseases. We Need to Improve Prevention and Reduce the Risks of Harmful Behaviour, concluded the Zdravotnický deník Conference on The Economics of Prevention**

The greatest killer of the modern age is not COVID-19, but diseases closely associated with lifestyle, such as cardiovascular disease, cancer, and mental illness. Their occurrence in the population has been stagnating or even on the rise, the known methods of prevention are no longer as effective, and their treatment costs are increasing. Therefore, the participants of the international panel of the Permanent Conference on Czech Healthcare, held on the topic of The Economics of Prevention, agreed that it is necessary to search for new approaches and to reduce the risks of harmful behaviour. This conference was held at Kaiserstein Palace and was attended by prominent representatives of politics, medicine, as well as healthcare payers from several countries. Aside from the Czech Prime Minister, Andrej Babiš, the Ministers of Health of the Czech and of the Slovak Republics, Adam Vojtěch and Vladimír Lengvarský, also had presentations. The former Vice-Prime Minister of the Slovak Republic and Minister of Health, Richard Raši, today a deputy of the National Council, also contributed to the discussion. The president of the Polish Association for Public Health, Professor Andrzej Mariusz Fal, the director of The Brunner Institute for Cardiovascular Research, Sackler Faculty of Medicine, Tel-Aviv University, Professor Reuven Zimlichman, the Chairman of the Czech Cardiology Society, Professor Aleš Linhart, and Chairwoman of the Czech Oncology Society, Assistant Professor Jana Prausová, also gave lectures on the Economics of Prevention. The perspective of clinical specialists was presented by their Chairman, Zorjan Jojko, and the role of general practitioners was described by the founding member of the Society of General Practitioners, Zdeněk Hamouz. Healthcare payers were represented by the director of the largest Czech public health insurance company VZP, Zdeněk Kabátek.

Despite the tragic statistics of the COVID-19 pandemic, the greatest killers of the modern age remain to be diseases very closely associated with our modern lifestyles. That is, cardiovascular, oncological, and mental illnesses. The vast majority of them can be prevented, and that with suitably targeted prevention. In 2019, the Czech Republic paid out 477 billion Czech crowns for healthcare, of which 382 billion Czech crowns covered the treatment of preventable diseases, that is, 80 percent. “Every crown that is invested into prevention thus saves many crowns paid out for treatment. The support of preventive measures and primary care, which is key for these fields, it absolutely fundamental,” the Minister of Health, Adam Vojtěch, proclaimed at the international panel of Zdravotnický deník’s conference on The Economics of Prevention.

As Prime Minister Andrej Babiš also pointed out in his speech, for more than a year, the COVID-19 pandemic has been straining the financial, human, and technical capacities of the healthcare system, which could have otherwise focused on the prevention and treatment of diseases such as cancer or drug addiction. On the other hand, it was clear that cardiovascular disease or obesity decidedly increased the risk of serious cases of the illness, as well as of Covid-related deaths. “And here the Czech Republic does not compare well in various international statistics, whether it be smoking or alcohol consumption. It is no wonder, then, that the Czech Republic ranked among the highest mortality statistics in terms of COVID-19. In this sense, the disease mirrored the state of health of the Czech population,” Vojtěch added.

The importance of prevention and of the early detection of diseases, which in turn saves money for

the system, is beginning to be perceived by those politicians responsible for allocating public financial resources. For instance, when it comes to oncological diseases, the Czech Republic already carries out three across-the-board screening programmes (breast cancer, colorectal cancer, and cervical cancer), and screening for lung cancer is planned to be launched in January. “We do not want to economize on preventive measures and on the treatment of grave diseases, especially oncological diseases,” stated Babiš. According to him, it was COVID-19 that clearly showed the key importance of preventive measures, in this case, vaccinations. At the same time, experts also point out that the known methods of prevention, for example in the field of tobacco control, are no longer bringing about the desired effect, that is, reducing the number of patients. It is necessary to seek out new trends and approaches, they say.

## The Implementation of Scientific Expertise into Public Policies is Absent

Everyone intuitively knows that exercise, a healthy diet, and well-being contribute to better health and to a higher quality of life. It is another thing to support this knowledge with hard facts and transform it into clear national policies with adequate financial support. Prevention is not a very attractive topic for politicians, because the specific results of the adopted measures practically arise no sooner than after one whole generation. Therefore, they are often rather reluctant to deal with the issues fully and to listen to scientific arguments.

It is the translation of scientific expertise into the decision-making processes that the Slovak Minister of



“Covid mirrored the state we are in,” said the Czech Minister of Health, Adam Vojtěch. Photo: Radek Čepelák



From the left: The Chairman of the Board of the Institute for Central Europe Martin Fedor, also the former Minister of Defence, who at 31 years of age became the youngest minister ever of Slovakia, just as his neighbour standing next to him, the present Minister of Health Adam Vojtěch. Further on in the photograph is the Director of the Institute for Central Europe, Katarína Cséfalvayová, and the publisher of *Zdravotnícký deník*, Ivo Hartmann. Photo: Radek Čepelák

Health, Vladimír Lengvarský, believes to be one of the “neuralgic nodes” of prevention. According to him, one of the significant sub-topics is the regulation of tobacco and alcohol consumption, and this is an area where it is “necessary to grasp the issues at hand coherently in an extensive dialogue along the entire spectrum of participants,” added the minister.

For that matter, smoking is one of the main risk factors for developing cardiovascular disease, which, despite the decrease in recent decades, remains to be the main cause of death in the Czech Republic. And we cannot expect any improvement. “It is time to stop slapping each other on the back. The number of cardiology patients has stopped decreasing,” Aleš Linhart, the Chairman of the Czech Cardiology Association and the Head of the Cardiology and Angiology Clinic of the First Faculty of Medicine of Charles University and the General Faculty Hospital, warned. And he added: “Our society began to lead healthier lifestyles, there is perhaps a higher quality of life. But these trends have already been exhausted.”

### **It is Necessary to Reduce the Impacts of Harmful Behaviour**

Just like the Czech Republic, other developed countries noted a significant decrease in the number of circulatory system diseases. However, as Professor Reuven Zimlichman, the Director of The Brunner Institute for Cardiovascular Research, Sackler Faculty of Medicine, Tel-Aviv University, pointed out, this trend has been stagnating, beginning around the year 2000. “If we wish to achieve a further decrease in

numbers, we must search for new approaches to prevention,” the professor claimed.

According to him, countries should take the path of harm reduction. People are often rather reluctant to change their habits, Zimlichman explained, and in such cases, the effort to reduce the harmful consequences of risky behaviour should be exerted. After all, such efforts can already be witnessed in several areas of everyday life, such as diet, tanning, excessive sweetening, or sex. The same can also apply to the significant risk factors of cardiovascular disease, such as smoking.

“Alternatives to smoking are recognised in some countries as less harmful types of nicotine consumption and are established as a powerful complementary tool to existing tobacco control measures,” Zimlichman delineated. In terms of this claim, he pointed out countries such as Great Britain, which actively supports electronic cigarettes as method that allows smokers to quit smoking, or the USA, where the Food and Drug Administration has already granted several alternative tobacco products the status of a Modified Risk Tobacco Product based on the available scientific evidence.

### **Legislation Should Also Consider Various Degrees of Risk**

In this respect, Andrzej Mariusz Fal, the President of the Polish Professional Association for Public Health and the Head of the Clinic for Allergies, Pulmonary Disease, and Internal Medicine of the Central Clinical Hospital in Warsaw, claimed that the three pillars of tobacco consumption control policies used to date,

i.e., increasing taxes, smoking bans in public areas, and supporting the quitting of smoking, have practically not moved Europe forward at all in the last fifteen years. “Therefore, the strategy of harm reduction could be the new approach. Otherwise, we will just remain at the same level as in 2007,” Fal agreed with those who spoke before him. He also presented the recommendations of the Polish group of experts that considered heated tobacco products. According to it, when pharmacotherapy fails to help smokers quit, such products, which in comparison to cigarettes reduce the harmful consequences of smoking, could be placed at the end of the spectrum of interventions used to support smokers in quitting smoking.

“Consequences increase with exposure. Therefore, the programmes with the greatest benefit are those that focus on reducing the greatest number of risks,” the Director of the National Monitoring Centre for Drugs and Addiction, Viktor Mravčík, confirmed. According to him, it is therefore necessary to create a balanced mix of measures in healthcare policies, which would combine the lowest degree of exposure to risk factors while also having the greatest degree of well-being. This, in turn, should be considered by legislation. “Less harmful products should be subject to less regulation,” Mravčík stated.

According to the Vice Director of the Všeobecná zdravotní pojišťovna health insurance company, Ivan Duškov, this is also a rather interesting topic for health insurance companies, who are the payers of healthcare. “The concept of harm reduction in smoking is certainly principal for us,” Duškov said.

## How to Connect Experts with Politicians

Without exception, the participants of the conference agreed that it is primarily each person, and no one else, who is responsible for their own health. And health insurance companies are beginning to take this fact into account. “If we should be able to influence the behaviour of those participating in public health insurance, and we convince them to responsibly approach their health and to contribute to the costs that their behaviour generates, then we will significantly reduce healthcare costs,” the Director of the Všeobecná zdravotní pojišťovna health insurance company, Zdeněk Kabátek, stated. According to him,

it is high time to find a model, in which the client of the insurance company is more involved in caring for their own health. “Neither the government nor the insurance company is responsible for the health of the population. We should also project this fact into the manner of financing healthcare,” Kabátek said. Of course, this cannot be achieved without a thorough information campaign and the education of clients on how to better care for their health and reduce risky behaviour.

“It is necessary to find a suitable mix of prohibitions and motivations. The government should penalise less and support more. And to do this, it should utilise to a greater extent the helping hand that science and innovations hold out,” the deputy of the Healthcare Committee of the Slovak National Council and former Slovak Minister of Health, Richard Raši, believed.

According to him, experts must seek out ways of translating their expertise, gathered evidence, and ideas to politicians. For instance, his parliamentary political party, Hlas, has included the principle of harm reduction in its healthcare programme. Connecting expert recommendations with the political establishment is not always easy. Therefore, Raši alleged that it would be conducive to develop international partnerships, in which experts and politicians could exchange information about which approaches work and have a positive impact on the economy. “This will then help us use better arguments for investing into prevention when creating state budgets,” Raši concluded.

This International Panel of the Permanent Conference on Czech Healthcare was realised with the gracious support of the General Partner of the conference, the Všeobecná zdravotní pojišťovna health insurance company, the co-organising partner, the Institute for Central Europe, and the partner companies of Sprinx Pharma and Satum Czech.

We will also present each of the panel topics in future editions of Zdravotnický deník.

Helena Sedláčková

# Vojtěch: Prevention is Fundamental Pillar. Newly Introduced Lung Cancer Screening Will Support It

The support of primary prevention and general practitioners, key stakeholders in this regard, is crucial in healthcare. According to Minister of Health Adam Vojtěch, every investment in this area will pay off many times over. Unfortunately, it is a given fact that the Czech population has not learned much in this area, not following advice on the benefits of exercise or toxicity of smoking and alcohol. Therefore, the Ministry of Health wants to strengthen secondary prevention at least by adding a fourth to the three existing oncology screening programmes. It is aimed at lung cancer detection in at-risk populations, i.e. long-term smokers over the age of 50, said Adam Vojtěch on July 22 at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare, which focused on the economics of prevention.



Minister Vojtěch wants to strengthen prevention in the fight against cancer by deploying a fourth screening programme for the early detection of lung cancer. Photo: Radek Čepelák

“Since the beginning of my mandate, I have been stressing that prevention is crucial and that every crown invested in prevention will save many other crowns spent on subsequent therapy. Promotion of primary prevention was one of the basic pillars I entered the Ministry of Health with. I am still convinced that in the Czech healthcare system – and this also applies to other healthcare systems – it is the general practitioner who bears responsibility for prevention,” says Minister of Health Adam Vojtěch.

When he took office four years ago, Vojtěch began right away with the reform of primary care. Based on discussions with GPs, some of their competencies were strengthened such as those in prescribing drugs or care provided to chronic patients (e.g. after cancer treatment). At the same time, GPs have also been motivated by health insurance companies to work longer office hours or to provide preventive care.

### **Covid served as a mirror**

GPs should be entrusted with primary prevention, such as providing advice on (non-)smoking, obesity, exercise and a healthy lifestyle, including alcohol consumption. Unfortunately, they still have a lot of work to do in this area. “The Czech Republic does not rank very well in the WHO or OECD statistics, especially in terms of alcohol consumption and smoking, and particularly among adolescents, where the problem starts. Promoting exercise, proper nutrition, non-smoking and less alcohol drinking are of key importance,” notes Vojtěch.

After all, even Covid-19 has shown that Czechia is not very successful in this regard. Comorbidities such as obesity and cardiovascular or lung diseases contribute to severe cases of this infectious disease, and this has been reflected in the number of victims.

“Covid served as a mirror showing the health status of the Czech population and that we have to work on it,” the Minister emphasises. Of course, vaccination plays a role as well, and not only that related to Covid-19. According to Vojtěch, vaccination is the only way to escape the current critical situation, and the Czech Ministry is joining in to help.

Additionally, the Minister is convinced that health insurance companies should use prevention funds as effectively as possible and link them more closely with the behaviour and attitude of their insured clients. “We may come across legislative provisions that will need amendment, but I think that a link to motivation is absolutely crucial. In this regard, health insurance companies are a key partner that can set up motivation. When an insured person already suffers a chronic illness, such as diabetes, where a lot depends on how the person behaves and adheres to a treatment plan, there should be relevant incentives for them in the public health insurance system and the prevention fund,” adds Vojtěch.

### **New screening from January**

Naturally, secondary prevention should be emphasized as well, i.e. early detection of diseases. This also includes oncological diseases which can be detected through screening programmes. Currently, the Czech Republic offers three national screenings of breast, cervical and colorectal cancer, which have helped reduce the number of deaths resulting from these diagnoses. This has been strikingly obvious in colorectal cancer, where the Czechs used to be at the forefront of international statistics ten years ago, and yet this has changed.

“We don’t want to end up with these three screening programmes only. So we are now preparing the fourth national screening for lung cancer, one of the most frequent killers in the Czech Republic. If you have a look at the mortality rate of specific cancers, lungs are unfortunately at the peak – in some regions, such as the Ústí nad Labem region, this is the main cause of death. It is therefore necessary to start with this screening, and we also reached an agreement with health insurance companies. At present, accreditation of providers that will CT-examine high-risk patients – long-term smokers over the age of 50 – is ongoing. We want this screening to start in January next year at the latest, and I believe that thanks to this, we will be able to save many lives,” adds Adam Vojtěch.

Michaela Koubová

# Neuralgic Nodes of Prevention in Slovak Healthcare System? Low Participation in Screenings or Translation of Scientific Findings to Decision-Making

Health insurance companies and state authorities alike should take an interest in increasing health literacy of the population. People, in turn, could thus make better decisions about their health. It is actually our habits that have a fundamental impact on our bill of health. Just as in the Czech Republic, the support of prevention measures in our neighbouring country of Slovakia is also not ideal. According to the Slovak Minister of Health, Vladimír Lengvarský, investments into prevention and health promotion, along with the emphasis on outpatient care, are key steps to a more effective healthcare system at a time when we can expect increased pressure caused by ageing population. Minister Lengvarský stated the aforementioned at the international panel of the Permanent Conference on Czech Healthcare focused on the economics of prevention, which was held on 22 July in Prague.



“With regard to the overall sustainability of the healthcare system well as of the overall fitness of the population, I find investments into healthcare and prevention to be key. To determine and implement effective programmes for prevention and control of chronic diseases, the coordination and reactivity of the healthcare system and its interconnectedness with technologies and organisational innovations is unavoidable,” Vladimír Lengvarský asserted, adding that it is also necessary to eliminate inequality in health and make quality care more easily accessible to citizens.

At the same time, health insurance companies and governmental authorities play a fundamental role. Although their functioning is set by legislation, further potential can be found in changing the paradigm along with the objective of increasing investments into prevention and early detection of diseases. This would result in savings for treatment of diseases in more advanced stages.

“Insurance companies should have an interest in increasing the health literacy of the population and their clients. However, the central point of the whole mechanism is the citizen and their responsibility for their own health and decisions they make according to their free will. Risk factors that lead to deaths, to a great degree, are a combination of behavioural and metabolic factors,” Lengvarský emphasised.

## Discussion on taxation at hand

Nevertheless, the Slovak ministry has been able to identify several neuralgic nodes in the approach to prevention. “We will need to re-evaluate translation of scientific findings into the decision-making process, just like improving the low participation in preventive screenings. These screenings, medicinally and economically speaking, are highly effective under the condition that they are organised and regularly evaluated,” Vladimír Lengvarský expounded.

Aside from this, other effective measures are known, such as taxation of sugary beverages that contribute to obesity and diabetes. It is similar to tobacco and alcohol control. According to Lengvarský, it is thus necessary to coherently address the issue, initiate a widespread debate, and create cross-section action plans.

In terms of preventive measures, Slovakia has been building on the National Cancer Plan which also includes, for example, a communication campaign aimed at informing the public about colorectal cancer or certification of mammogram centres.

“With these activities, we also reflect the European Beating Cancer Plan, which is a key partner and pillar of a strong European health union. We are convinced that the international dimension is one that permits us to provide expertise and other activities from which we can further benefit and develop at the national level,” Vladimír Lengvarský pointed out.

## The potential of investing into prevention

Minister Lengvarský also pointed out that the ageing population will create pressure on healthcare costs and long-term care. It is expected that in Slovakia, the growth in costs in this field will be greater than the EU average in the next decade.

“At the same time, the healthcare system, in terms of the reform process that is just beginning, shows the potential for increasing effectivity through better costs control, transferring the emphasis to the outpatient care and increasing investments into prevention and health promotion,” Lengvarský added.

Michaela Koubová

# Effective Policies Combatting Addictions Must React to Different Levels of Harmfulness of Addictive Substances

Effective policy to regulate addictive behaviour should focus on those risk factors that contribute most to the burden on health. In the Czech Republic, this means smoking, and alcohol consumption also plays a significant role. According to Viktor Mravčík, Head of the National Monitoring Centre for Drugs and Addictions, the approach of the government should be a balanced mix of measures, seeking a balance between the lowest possible level of regulation, the lowest possible exposure to risk factors, and the highest possible level of mental well-being at the same time. It is also important to adhere to the principle of harm reduction and to take into account the different levels of risk posed by different addictive substances and products.

Priorities in the field of addiction as well as public health policy should be set according to the level of the burden on health. In other words, such a policy should primarily address those risk factors that contribute to this burden on health. “And this also applies to interventions. It is necessary to give priority to those that have the potential to achieve the greatest health benefit,” said Viktor Mravčík, Head of the National Monitoring Centre for Drugs and Addictions, at the international panel of the *Zdravotnický deník* Permanent Conference on Czech Healthcare focusing on the economics of prevention, which took place on 22 July.

## Smoking as the number one risk factor

In developed countries, including the Czech Republic, addictive substances such as tobacco and alcohol are among the ten most important risk factors contributing to the overall health burden, according to a comprehensive 2017 global study. “Tobacco is the number one risk factor, both in terms of mortality and in terms of DALYs, the comprehensive indicator of years of life lost due to morbidity and mortality. Alcohol causes less than half of the

burden on health, and all illegal drugs together cause even less,” Mravčík says.

And it is not just developed countries that ranked in the top ten in relation to purely behavioural risk factors, i.e. lifestyle factors that can be prevented. Even in a global perspective, the significance of addictive substances is high, with tobacco ranking fourth and alcohol and drugs ranking eighth.

In this context, the World Health Organization (WHO) further notes that only half of the global burden on health can be attributed to any of the 84 risk factors examined in the study. “The other half cannot be attributed and it is not clear why these people are sick and why they die earlier,” Mravčík continues. The so-called allostatic load comes into play, i.e. the human body’s reaction to chronic psychosocial stress; when stress hormones are released at a higher level, organs wear out and people are sick earlier and die earlier as well. “Mental well-being is also a very important factor for health. The link between mental discomfort, somatic diseases and addiction is thus clear,” says the addictologist.



Head of the National Monitoring Centre for Drugs and Addictions, Viktor Mravčík. Photo: Radek Čepelák

### **We classify addictive substances and sub-products according to the level of their harmfulness**

In the Czech Republic, approximately one fifth of people die as a result of smoking, which is just under 20,000 deaths a year. Alcohol accounts for about six per cent of all mortality, while this proportion is significantly higher among adults aged 35-44 (26 per cent for men and 17 per cent for women). From the DALYs perspective, on average, it is fifteen years of life lost per smoker who dies. For an alcohol consumer, it is ten years more.

According to Mravčík, in general, the greater the exposure to an addictive substance, the greater the risk of addiction. “Thus, programmes that focus on reducing the largest portion of exposure and health risks have the greatest benefit. 70 percent of the mortality attributable to alcohol can be attributed to the small

proportion of population that drinks heavily. That is where it makes sense to focus prevention programmes in the first place,” he explains.

At the same time, it should be borne in mind that long-term heavy use over time has consequences not only at the individual level, but also in the person’s environment and society as a whole.

“With this complex prism in mind, we then rank addictive substances according to harmfulness. We are talking about the so-called risk continuum,” the addictologist continues. “The same applies to different products made of the same substance, such as different products for the use of tobacco. Classic cigarettes are perceived as the most harmful. Other nicotine products, whether tobacco or non-tobacco, mean less risk and therefore less likelihood of health consequences,” he explains.

## Effective drug policy consists of a balanced mix of measures

According to this ranking, it is then also possible to assign different forms and degrees of regulation to addictive substances. Addictologists speak in this context of the so-called U-curve. “At its both ends, there occur highest societal damage and health costs. On the one hand, it is the unregulated, unrestrained, commercial market that brings the highest exposure and the highest health and social harm. On the other hand, there is an unregulated black market due to prohibition, with a high degree of health risks. Addictive substances go unchecked and are associated with high crime rates. In the middle, there is optimal regulation associated with the lowest health damage and also the highest level of well-being,” says Viktor Mravčík.

According to Mravčík, an effective drug policy should thus consist of a balanced mix of measures, seeking a balance between the lowest possible level of regulation, the lowest possible exposure to risk factors, and the highest possible level of mental well-being at the same time. In the case of tobacco control, Mravčík provides the “MPOWER” set of measures recommended by WHO as an example. This includes monitoring of tobacco use and tobacco control policies, protection against tobacco smoke, offering help with quitting, warning on the dangers of tobacco use, enforcing bans on tobacco products advertising, promotion and sponsorship, and finally raising taxes on tobacco.

“All these measures have a clear preventive effect, including tax increases. In this last case, too, it is not just a revenue stream for the state treasury, but a tool that influences demand, reduces consumption and therefore exposure and risk,” he adds.

## Regulation should take into account different levels of risk

Furthermore, according to Mravčík, the nature of regulation should also correspond to the harmfulness of the products in accordance with the aforementioned risk continuum. “Higher-risk products should be subject to stricter regulation than less harmful ones,” he says. In principle, this is an application of the well-

known principle of harm reduction related to usage of addictive substances.

It is also part of the current Czech National Addiction and Prevention Strategy. “People usually think of a needle and syringe exchange for drug addicts. But this principle is the purpose of measures across all pillars of our strategy,” says Mravčík, who believes that harm reduction is also represented by a seat belt in a car or a helmet for skiers or cyclists.

The extent to which this principle applies is now widely debated in professional circles in the context of tobacco control policy. “We are talking about reducing exposure to harmful substances that cause diseases, particularly cardiovascular and cancer diseases, without necessarily reducing nicotine consumption. Actually, people smoke because of nicotine, but they die because of the tar in cigarettes,” Mravčík explains.

The question is therefore to what extent incorporate alternatives to conventional cigarettes, such as electronic cigarettes or heated tobacco products, into national strategies to combat addictions. “These alternatives are already becoming part of some countries’ health policies,” Mravčík continues. Examples include the UK’s Public Health England (PHE) service, which has already included e-cigarettes as a cessation aid in its concepts, and the US Food and Drug Administration (FDA). According to the FDA, some tobacco products (oral and heated tobacco) pose a modified risk to their users and their manufacturer can market its product in the US with this information.

“For health authorities such as the World Health Organization, however, this is still a somewhat controversial area,” adds Viktor Mravčík. The WHO has made no secret of its concern about the risk of addiction in people who have not used nicotine before, especially children. “The alternatives therefore need to be well balanced between the health benefits of reduced exposure in smokers and quitters as well as the risk of addiction in quitters or non-smokers,” concludes the addictologist.

Helena Sedláčková

# Zimlichman: We Need to Have an Open Mind and Apply Harm Reduction in Prevention Anywhere Possible. Otherwise, Nothing Will Change

Approximately twenty years ago, developed countries, including the Czech Republic, saw a stalling in the until-then significant drop in cardiovascular disorders, and the situation has not changed considerably. We have to search for innovative approaches to prevention, declared Reuven Zimlichman, Director of the Institute for Cardiovascular Research, Sackler Faculty of Medicine, Tel-Aviv University, at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare. Harm reduction will continue to play a larger and larger role in prevention policies, whether pertaining to smoking, obesity, exercise, or diet. Both experts and politicians have to play an integral role in this effort.



From the left: Director of the General Health Insurance Company Zdeněk Kabátek, President of the Czech Society for Cardiology, Head of the Department of Cardiology and Angiology, First Medical Faculty of Charles University and the General University Hospital Aleš Linhart, President of the Polish Society for Public Health, Head of the Department of Allergology, Lung Diseases and Internal Medicine, Central Clinical Hospital in Warsaw Mariusz Fal, Minister of Health Adam Vojtěch. Photo: Radek Čepelák

Approximately twenty years ago, developed countries, including the Czech Republic, saw a stalling in the until-then significant drop in circulatory system disorders, and the situation has not changed considerably. “If we wish to achieve a further decrease in numbers, we have to search for innovative approaches to prevention,” declared Reuven Zimlichman, Director of the Institute for Cardiovascular Research, Sackler Faculty of Medicine, Tel-Aviv University, at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare.

According to him, the principle of harm reduction when it comes to addictive behaviour should play an increasingly greater role in prevention policies. “We have to take advantage of all the possibilities that this approach offers. We have to try to forestall the harm of cigarettes, alcohol, bad diet, or insufficient exercise to the maximum degree. This can save many lives,” Zimlichman claimed.

He also believes that governments have to play a highly extensive role in these efforts. “Governments should put together special teams of experts that will evaluate substitutional therapy and will be able to prove that these alternatives are better than the original addiction itself. We need to have an open mind and apply the principle of harm reduction anywhere possible,” he appealed. And added: “And, we have to teach children and young adults how to lead a healthy lifestyle. Old people are rather reluctant to change their lifestyles.”

### **Limiting of just one single risk factor already helps**

To date, experts have identified approximately 200 risk factors for developing cardiovascular diseases, which remain the greatest killer in the Czech Republic. However, there are “only” about twenty of the most significant factors. According to Zimlichman, they can be divided into three categories depending to what degree they can be prevented and whether they are treatable. “Among those factors that can be changed, or at least we think so, are smoking, obesity, diet, stress, excessive alcohol intake, and lack of exercise. There are patients that can quit smoking, improve their diet, and lose weight. But on the other hand, there are also those who are not able to,” Zimlichman explained.

Those risk factors that we cannot avoid include, for example, age, gender, family history, or ethnicity. And finally, we have factors that also contribute to the progression of illness but can be treated: the better we are able to do so, the less grave the disease. Here experts place, for example, hypertension, high blood cholesterol levels, heart arrhythmia, or diabetes. “The more risk factors one patient has, the greater the risk (the graver the disease). If just one single risk factor is taken care of, it greatly affects the entire risk of developing cardiovascular disease,” he specified.

When it comes to cardiovascular diseases being the cause of death, according to Zimlichman, we should fear hypertension the most, then smoking and high blood sugar levels. A lack of exercise, being overweight or obese, or high cholesterol levels have a somewhat smaller influence.

### **We have to search for innovative solutions**

As already mentioned above, until 2000, practically all developed countries witnessed a gradual decline in cases of cardiovascular diseases. Since then, however, the curves have been stagnating. In 2016, the World Health Organisation (WHO) published a list of recommended strategies that should reduce this health burden by a quarter before 2025. Despite this, no fundamental improvement can be seen since then.

“If we are to continue at this speed, the question remains whether we shall ever achieve a better result,” Zimlichman speculated. “If we want our curves fall again, we must find another solution, a novel approach. The graphs clearly show this. Of course, we must continue in the efforts we are already familiar with and that we are able to explain and teach patients, but our success rates are limited here. If we want an overall improvement, we have to begin doing new things,” professor added.

### **If you cannot quit, then try less at least**

According to Zimlichman, we have to simply begin to accept that people make bad decisions even if it has a negative impact on their health. “They continue to over-eat and eat chocolate, even if they have diabetes. Patients



Czech Prime Minister Andrej Babiš also greeted the participants of the Zdravotnický deník Permanent Conference on Czech Healthcare. Photo: Radek Čepelák

with chronic obstructive pulmonary disease continue to smoke, and those with ischemic heart disease continue to lead sedentary lifestyles and have unhealthy diets,” he listed the weaknesses of not just his patients.

He believes that doctors should find a compromise between a patient’s behaviour and their freedom to decide on their own lives and expert recommendations in terms of lifestyles, habits, and treatments. “And this is not always successful,” he stated. The answer lies in the principle of harm reduction when it comes to human health. This principle is successfully applied in a range of fields: “With regards to unhealthy diets, we use statins, stents, or an antiaggregant. We protect ourselves from sun rays with filters. We satisfy our cravings for sugar with sugar substitutes. We protect ourselves from sexually transmitted diseases by using condoms or getting vaccinated,” he delineated. Zimlichman explained that rather than focusing on the harmful behaviour itself, the principle of harm reduction focuses on the result of this harmful behaviour. “In other words, if you cannot quit, then try less at least. If you cannot stop taking illegal drugs, then prevent overdosing and spread of infections,” he specified.

In regard to what was said, it is no surprise that this opinion is considered somewhat controversial. Such

behaviour also bears negative aspects - it can be illegal, or immoral at the very least. “But people who do not want to change, or who are not able to, exist. It is in such situations that harm reduction can be beneficial in terms of chronic diseases that are caused,” Zimlichman explained.

## The cruel reality

He also believes that the same approach be applied in the case of smoking. “Yes, the best thing to do is quit but estimates show that worldwide, about a billion people will continue to smoke in the near future. If we tell them that they should quit smoking and they do not quit, do we leave them to their fate? Or do we come up with something that will improve their chances?” he asked rhetorically.

As already mentioned, smoking is one of the most significant risk factors in the development of cardiovascular diseases, which can be avoided, however. “In comparison to non-smokers, the risk of myocardial infarction is six times higher in those women and three times higher in those men who smoke at least twenty cigarettes daily. If the patient in question quits smoking after their heart attack, the risk of its recurrence within one year is lowered by one half, and in two

years, they will be on the same level as non-smokers,” Zimlichman pointed out.

Despite this clear evidence, the reality remains cruel. Studies show that 49 percent of smokers with damage to their coronary arteries do not quit their bad habit even after being diagnosed. This is also true for the 57 percent of those who survive a heart attack and for the 72 percent of patients with peripheral artery disease.

Therefore, to Zimlichman it makes sense to reduce the harm of smoking with the help of alternatives to conventional cigarettes, which significantly lower the risk of developing a disease. “If we convince a patient to use one of the alternatives in which there is no combustion, their chances greatly increase,” he stated.

In some countries, these alternatives have already been established as a permanent component of prevention policies, such as in Great Britain, where Public Health England (PHE) already considers electronic cigarettes as a tool for quitting, or the US Food and Drug Administration (FDA). According to FDA, some tobacco products (based on oral and heated tobacco) are modified risk tobacco products for consumers, and their producers can sell these products with this information on the US market. Sweden, which is the only country in the EU where smokers can use oral, smoke-free, tobacco called snus, has recorded the lowest smoking rate in the EU and the lowest lung cancer death rate, as well as other smoking-related diseases.

“We already have sufficient evidence that these alternatives can help. However, it is slow going and people have a low level of awareness of them. If they are talked about more, people will also begin to better understand them,” Zimlichman believes.

## **We have to remedy the last 50 years of human development**

We can come to similar conclusions in the cases of being overweight or obese along with the lack of exercise. Although Zimlichman concedes that there is no scientific evidence available that proves that the losing of weight among older obese people leads to lowering their death rate, it is still true that obesity increases the risk of hypertension, high blood cho-

lesterol levels, or diabetes. On the contrary, losing weight means a greater level of physical activity for patients, and thus a lower dependency on others and also a higher quality of life. Then, especially for older people who exercise less, more exercise then offers, for example, improved blood pressure, a lower blood sugar and lipid level, improved neurocognitive functions, and again, a higher quality of life and lower dependency on others.

There is room for harm reduction as well. In terms of obesity, it is bariatric surgery, despite its rather limited success rate. Not all patients are willing to undergo surgery for fear of complications. Furthermore, when treating diabetes, we know modern therapies such as GLP-1 agonists or the Ozempic or Victoza medications. Food labelling can also help. “In Israel, we have special stickers that label food with a high sugar content, or that are high in calories and fat. They are supposed to help parents avoid buying food for their children that is not healthy,” Zimlichman described.

“As for exercise, the WHO recommends 150 minutes of moderate-intensity exercise each week. However, we must convince patients to exercise at least ten minutes a day. If you exchange your sedentary lifestyle for any type of exercise at any intensity, you will always achieve significant health improvement. Whether it be the overall flexibility of the body, balance, or increased self-esteem,” professor added, according to whom simple walking - the faster, the better - already helps. Furthermore, with a lack of exercise, one is greatly at risk for developing muscle loss disease (sarcopenia). This worsens with age and leads to immobility. In this regard, Zimlichman believes that we must focus on children and young adults. Studies show that they have less physical activity, which can lead to health complications in the future.

“During the last two and a half million years, we as people became erect, lost weight, and became more active. In the last fifty years, however, something has happened - we slouch, we are getting fatter, and we are increasingly lazy. We must change something to rectify this development,” Professor Reuven Zimlichman concluded.

Helena Sedláčková

# It is Fundamental That We Invest In Prevention and Treatment of Cardiovascular Diseases, Or the Death Rate Will Increase

The Czech Republic enjoyed decades of decreasing death rates from cardiovascular diseases thanks to improving conditions. Sadly, this trend has come to an end. Even before the Covid-19 pandemic began, the curve had begun to turn upward. Seeing that Czechs turn a deaf ear to the word “prevention” (not to mention health consequences of the pandemic itself), it cannot be expected that any turn for the better will occur without further effort. According to the President of the Czech Society for Cardiology Aleš Linhart, investing in prevention and treatment of cardiovascular diseases should be high on the agenda. It is the responsibility of each and every one of us, he appealed at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare, which was held on Thursday, 22 July in Prague.



President of the Czech Society for Cardiology and Head of the Department of Cardiology and Angiology, First Medical Faculty of Charles University and the General University Hospital, Aleš Linhart at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare, which was held on 22 July. Photo: Radek Čepelák

“Our situation is not at all rosy. In the last years, we have been patting ourselves on the back much too often and now it is time to stop. As cardiologists, we used to be worried that, figuratively speaking, we would be at loose ends with nothing to poke into since the number of cardiology patients was constantly decreasing and life spans extended. However, now there is an actual risk that we have achieved the maximum that could be achieved, with respect to the fact that as a country we are better off and our social-economic situation and

healthcare have improved. Sadly, when we look back at how we handled the competition in Europe, the results are much worse than in football. No matter what statistics you look at, the Czech Republic ranks among those countries with the highest incidence of cardiovascular diseases and with the highest mortality from them,” Aleš Linhart stated.

Today, approximately 40 to 50 percent of Czechs die from cardiovascular diseases (44 percent of men and

47.5 percent of women). And even though the number of Czechs who died from cardiovascular diseases was following a downward trend for several decades, it is no longer valid. Czechia is copying the situation in Western countries where deaths from such diseases in the age group of up to 74 years are again on the rise. Here, the death rate has again been rising since 2016, which, according to Linhart, is by no way a result of possibly worse healthcare accessibility. Even during the Covid-19 lockdown this did not happen, though in the months of the pandemic's climax, the number of patients arriving to hospitals with myocardial infarction fell by 20 to 27 percent. Every fifth patient either confused heart attack symptoms with Covid-19 (both are associated with shortness of breath and tightness of the chest), or they were too frightened to go to the hospital because of Covid-19.

## Reimbursement of new medicine would help

However, the trend is not the same with all cardiovascular diseases. For example, the number of deaths from myocardial infarction continues to drop, and on the contrary, the number of people with heart failure, labelled by cardiologists as the pandemic of the 21st century, balances this number out. "Here, we are the victims of our own success. Although an effectively treated infarction means that the patient survives, it does not mean that they have survived without a risk of heart failure. The number of hospitalisations for heart failure is a problem for health insurance because today, there are already several hundreds of thousands of hospitalisations annually. This means an economic burden for the entire system," Aleš Linhart expounded. He added that now the number can grow also due to the aforementioned group of patients who left their infarctions untreated.

Sadly, Czechs support this dire trend with their lifestyles. Especially in males, the average BMI in all age categories is on the rise, and with females, it is growing especially in the youngest age group. As for smoking, this has been slightly decreasing among males in the past decades, yet with females in the youngest age category, it is on the rise. Studies show that there is a connection between smoking, including second-hand smoking, and the achieved education level; the higher the education level, the lower the percentage of smokers. A risk factor for

cardiovascular diseases is also diabetes, which approximately one million Czech people currently suffer from.

Another cheerless fact is that although the average life span has extended in the Czech Republic, the number of healthy life years has not. So, although Czechs are living to a ripe old age, they spend a large chunk of their lives being sick. In this respect, the Czech Republic even ranks among the worst-placed countries.

The prospects are such that if we do not begin to act, the number of deaths from cardiovascular disease will increase. As predictions for the USA show, without further measures, mortality from cardiovascular diseases will increase by 41 percent by 2040.

"In terms of prevention and therapy, cardiovascular medicine is an area that we must invest in. Prevention measures will be expensive but if we invest in them, we will spare people bothersome complications such as diabetes mellitus. Reimbursement of certain medicine would markedly help the situation," Linhart pointed out. Risk factors like hypertension, high cholesterol and diabetes can be treated; however, according to professor, new medicine is not being included under coverage plans quick enough.

## The economic situation plays a role

The success of our struggle with cardiovascular diseases depends on the economic situation of the country as well as of individuals. According to a Swedish study, people who have suffered an infarction or stroke have a worse prognosis if they belong to a lower income category. This fact is also confirmed by Czech data, where the poorest regions have the highest hospitalisation rate for acute myocardial infarction – the difference between Prague and the Ústí nad Labem Region is more than 50 percent. However, in international rankings, the Czech Republic is in a position where even the slightest drop in GDP is associated with a steep increase in cardiovascular mortality.

The association between cardiovascular problems and the socio-economic situation is also projected in treatment accessibility. "It is fair that it is up to each healthcare system when, how and which treatment it covers. Sadly, the Czech healthcare system is set up so

that the majority feels that everything should be covered by public health insurance and thus all treatment is practically free of charge. This is impossible, and we are still not used to pay for certain things from our own pockets. This is, however, problematic as mostly we need to improve the situation in socially disadvantaged regions – and try to convince patients there to pull out their wallet to pay additional 1,200 crowns monthly for a package of gliflozins,” Aleš Linhart observed.

However, because of Covid-19, the socio-economic situation is at risk of worsening. This is due to social deprivation, the increase in psychiatric diseases, or obesity, all boosted by the long lockdown.

“We do not want to deny anyone the right to eat pork, dumplings and cabbage, have a few beers and cigarettes, and enjoy a lack of exercise; this is everyone’s choice. As a cardiologist, however, I am saddened by the fact that we are tilting at windmills, and that includes very young patients,” professor Linhart emphasised, saying that half of the male population suffers an infarction at a productive age.

### **The system of preventive check-ups is generous. Yet, we do not take advantage of it**

What shall we do? “Primarily, we should appeal to our personal responsibility. For thirty years already, the government has no longer been the guarantor of our health; this role has been assumed by each and every one of us. Everyone is liable for behaving respon-

sibly as regards preventable illnesses. In the Czech Republic, we have established a very comfortable system of preventive check-ups, which falls on the shoulders of general practitioners. It is a shame that it is not fully exploited in spite of its generosity. You can hardly find another country where conditions are so well set up,” professor Linhart stressed.

According to him, every adult should know their cholesterol level, blood pressure, whether they have diabetes, or heart arrhythmia. This is the aim of the Czech Society for Cardiology’s campaign, “Nemocné české srdce” (The Sick Czech Heart) launched several weeks ago. Yet, Aleš Linhart believes that the Czech Republic has to start moving even more. With those patients who already suffer from a disease, it is necessary to not only diagnose it but also make sure that the patients stick to their treatment. Diseases such as hypertension or cholesterol cause no pain, and patients tend to stop taking their medicine properly after some time. A year after first being treated, half of patients take their medicine no more.

At this point, we cannot count on any vast improvement in the prevention of cardiovascular diseases and respective decline in deaths. Although the Czech Society for Cardiology has set the goal of decreasing the death rate from cardiovascular diseases by five percent in next ten years, now it seems that this objective will be difficult to achieve. “On behalf of the Society, I promise that we will fight to make it,” Linhart concluded.

Michaela Koubová



“We do not want to deny anyone the right to eat pork, dumplings and cabbage, have a few beers and cigarettes, and enjoy a lack of exercise; this is everyone’s choice. As a cardiologist, however, I am saddened by the fact that we are tilting at windmills, and that includes even very young patients,” professor Linhart emphasised. Photo: Radek Čepelák

# Fal: Sooner or Later, the Covid-19 Pandemic Will Be Over but Smoking Will Remain. Politicians Should Listen to Experts

Despite the Covid-19 pandemic, chronic non-communicable diseases still remain the greatest killer and continue to cost the society considerable amounts of money. At the same time, even though tobacco is one of the most significant risk factors, current tobacco control policies are no longer working, and the numbers are stagnating, says Andrzej Mariusz Fal, President of the Polish Society for Public Health and the Head of the Department of Allergology, Lung Diseases and Internal Medicine of the Central Clinical Hospital in Warsaw. Politicians should therefore heed experts more and make decisions based on their advice. According to Fal, for example, when pharmacotherapy fails to help smokers quit, alternative products, which in comparison to cigarettes significantly reduce the harmful consequences of smoking, could be placed in the range of interventions used to help smokers to quit smoking.



President of the Polish Society for Public Health, Head of the Department of Allergology, Lung Diseases and Internal Medicine, Central Clinical Hospital in Warsaw, Mariusz Fal. Photo: Radek Čepelák

In the last fourteen months, 4.2 million people around the world died of the SARS-CoV-2 viral infection. In the same period, ten times more people died from chronic non-communicable diseases. “The Covid-19 pandemic will end sooner or later, but smoking will still be here with us,” declared Andrzej Mariusz Fal, the President of the Polish Society for Public Health and the Head of the Department of Allergology, Lung Diseases and Internal Medicine of the Central Clinical Hospital in Warsaw, at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare, held on the topic

of the economics of prevention.

According to Fal, people will be primarily dying from cardiovascular diseases, myocardial infarction, or pulmonary diseases even twenty years from now. These are real risks that cost our society great sums of money. In addition, we are getting older, the physician pointed out. “The older we are, the more we suffer from chronic diseases. Despite this fact, most patients did not evade risk factors throughout their lives. And this, in turn, is expensive,” he added.



Professor Fal debates with the Editor-in-Chief of Zdravotnický deník and the host of the discussion Tomáš Cikrt. Photo: Radek Čepelák

## Economic losses reach billions

According to the study published by the international consulting company EY in 2017 in cooperation with the team of A. M. Fal, Poland annually spends around PLN 442 million (approximately CZK 2.5 billion) on the treatment of chronic obstructive pulmonary disease. At the same time, direct costs for healthcare comprise only approximately one fifth of what this disease costs society overall. This is also confirmed by data from, for example, Great Britain, where experts researched the social costs of smoking. They calculated to the costs at GBP 12.6 billion (approximately CZK 376 billion). “However, direct costs were only GBP 2.5 billion. The loss of work productivity accounted for another GBP 8.6 billion, and society spent GBP 1.4 billion on social care. And this does not include those costs paid by the patients themselves, e.g., for transport,” Fal explained. “Turning back to Poland, this means that we are not dealing with just a half a billion, but with total costs in the amount of approximately five to seven billion zloty annually,” he calculated.

In terms of economics, it is thus more than obvious that the consequences of chronic diseases lower a country's GDP. Other studies have calculated total losses of the USA's GDP in the period of 2015 – 2050 to be USD 95 trillion (approximately two quadrillion crowns). Of this, 11.3 trillion is spent on cardiovascular diseases,

10.4 trillion on malignant tumours, 5.6 trillion on chronic pulmonary diseases, and 6.4 trillion dollars on diabetes.

## Staggering numbers that can be prevented

Nevertheless, lifestyle diseases, which cause 63 percent of deaths worldwide, can be prevented in most cases. In fact, they are contingent on human behaviour. “Each year, about 7.2 million people worldwide die because of smoking (of which two million are non-smokers regularly exposed to cigarette smoke). 6.8 million people die because of pollution, and 4.1 million due to excess sodium intake. Alcohol causes 3.3 million deaths, and 1.6 million people die because of insufficient exercise,” Fal calculated, citing the data of the WHO. “These are staggering numbers that will continue to worsen if we do not do anything,” he insisted.

In terms of prevention, primary prevention is the key. This, however, must begin already with children and young adults, so that they carry proper habits with them into adulthood. According to Fal, however, this will take one whole generation before we see specific results. This is again shown in data from the USA, where experts monitored the relation between cigarette sales and the number of deaths from lung cancer. It took long twenty years from introducing the first measures that limit the consumption, and thus



Photo: Radek Čepelák

also the sales, of cigarettes, before the lung cancer death curve began to fall again. “And this goes beyond the time horizon of politicians who cannot see beyond one four-year election period,” Fal pointed out.

### The principle of harm reduction can bring about change

It is therefore very important to pay attention to all prevention levels – primary, secondary, and tertiary. In the case of tobacco consumption, which is one of the most significant risk factors, measures such as increasing excise duties, prohibiting smoking in public areas, or providing support in the quitting process have been applied for a long time. According to Fal, however, these measures are no longer as effective in the present day. In terms of the legislation of Europe and the USA, no fundamental progress has been made for many years, and the numbers of patients have been stagnating in the long-term. As a matter of fact, other experts also point out this fact. Similarly, Fal claimed that many patients (in his case, a whole quarter) refuse to quit smoking even when their disease progresses. “People have the right to do so, and we must count on this possibility. Yet, we must also talk about what to do about it,” he said.

Therefore, he believes that we also need to consider tertiary prevention. “A novel approach could be the principle of harm reduction. Otherwise, we will just remain at the same level as twenty years ago,” Fal said. Patients that refuse to cooperate further (i.e. apply nicotine substitution therapy or pharmacotherapy) could then receive interventions in line with this principle as prescribed by their physicians.

He also presented the recommendations of the Polish group of experts that analysed heated tobacco products. According to the group, when pharmacotherapy fails to help smokers quit, such products, which in comparison to cigarettes reduce the harmful consequences of smoking, could be placed at the end of the range of interventions used to support smokers to quit smoking. “It is much better to invest money into support systems that would reduce the harm of smoking than to spend this money ten years later on the treatment of gravely ill patients,” Fal asserted.

### Politicians should heed experts more

According to Fal, it is very important that politicians pay greater heed to the opinions of experts on the issue of appropriate preventive measures. “If in Poland the social costs of chronic obstructive pulmonary disease reach seven billion złoty and a total of 23.5 billion złoty is collected from the excise duty on tobacco products and from VAT, then logically, politicians have a conflict of interests,” Fal asserted. “So, they are not the ones that should be making the decisions, but cardiologists, non-governmental organisations, and similar groups,” he ventured to claim.

However, ministers always end up having the final word, so how can we connect political decisions to expert advice? “Much has already been said and written, and politicians are, in fact, often aware of this information, but in the end they do not heed it. If there was any mechanism to make the following of expert advice compulsory for politicians, that could be a way,” Fal concluded.

Helena Sedláčková

# PM Babiš: Covid Highlighted the Importance of Prevention. It Shall Be Supported by Money from the National Recovery Plan

The Covid-19 pandemic revealed the importance of prevention in several aspects. People who follow preventive measures are in a much lower risk of getting the disease. The number of severe cases of Covid-19 and number of deaths clearly showed that the health status of the Czech population is in no way brilliant – and the greatest risks for a serious case relate to lifestyle diseases, such as cardiovascular diseases or obesity. In addition, we could see how the health condition of many people has deteriorated during times they were too worried to see their doctor. According to Prime Minister Andrej Babiš, it is therefore even more important to start paying attention to the issue. The plan to establish the Czech Oncology Institute and the National Virology Centre with the help of money obtained from the EU through the National Recovery Plan aims at this direction, said Babiš in his video message at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare of 22 July, which focused on the economics of prevention.



Prime Minister Andrej Babiš during his video message to the participants of the international panel of the Zdravotnický deník Permanent Conference for Czech Healthcare. In the panel from the right: ZD Editor-in-Chief and Discussion Host Tomáš Cikrt, President of the Society for Public Health of the Republic of Poland and Head of the Department of Allergology, Lung Diseases and Internal Medicine of the Central Clinical Hospital in Warsaw, Andrzej Mariusz Fal, President of the Czech Society of Cardiology and Head of the Department of Cardiology and Angiology, First Faculty of Medicine, Charles University and General University Hospital, Aleš Linhart, Director of the General Health Insurance Company, Zdeněk Kabátek, and Head of the National Monitoring Centre for Drugs and Addictions, Viktor Mravčík. Photo: Radek Čepelák



From the right, ZD Editor-in-Chief and Discussion Host, Tomáš Cíkr, President of the Czech Society for Atherosclerosis, Michal Vráblik, President of the Czech Oncology Society and Head of the Oncology Clinic of the 2nd Medical Faculty of Charles University and Motol University Hospital, Jana Prausová, Deputy Director of the General Health Insurance, Ivan Duškov, President of the Association of Outpatient Specialists, Zorjan Jojko, Director of the State Health Institute, Barbora Macková, founding member of the Association of General Practitioners of the Czech Republic, Zdeněk Hamouz, and Director of the National Institute of Mental Health, Petr Winkler. Photo: Radek Čepelák

“Not just the Czech healthcare system underwent an unexpected and extremely difficult test in the fight against the coronavirus pandemic in 2020 and 2021. In addition, the topic of prevention has become more than relevant, since experience has shown that prevention alone, especially in the form of vaccination, represents the most effective protection against the spread of the disease. The most vaccinated age groups are the least affected by the Delta variant compared to younger people, among which the vaccination coverage is lower,” says Andrej Babiš.

As of 22 July, four million people in the Czech Republic were fully vaccinated and 1.2 million received their first dose. According to Babiš, the interest in vaccinations was increased by opening centres for unregistered candidates.

National vaccination coverage is essential also for the return of healthcare to its normal functioning. “Over the year, coronavirus has drawn on human and technical capacities of the Czech healthcare system, which could have otherwise been used to prevent and treat other diseases, such as cancer, or addictions,” says Babiš, recalling that the government has increased money in healthcare by CZK 103 billion since last year, and recently decided to further increase payments for state-insured people with additional CZK 15 billion.

## The National Virology Centre to be the headquarters for fighting epidemics

Therefore, Babiš would now like to pay attention to prevention. “We do not want to economize on prevention and treatment of serious diseases, especially oncological ones. Cancer is and will be an increasingly serious problem. The death rate for this disease is higher in our country than in the EU, and the coronavirus has made our situation even worse in this respect. People attended screenings less and the unfortunate result could be seen in near future. That is why I have been promoting the construction of a new oncology institute in Prague which will be located at Královské Vinohrady University Hospital and will be the second centre exclusively specialized in oncology in the Czech Republic after the Masaryk Cancer Institute in Brno,” Babiš outlines.

In connection with Covid-19, the Czech Republic will receive financing from the EU for the implementation of the National Recovery Plan. A total of CZK 180 billion have been negotiated within its framework, whereof almost seven billion should be spent on the construction of the aforementioned institute.

“We also want to re-establish the National Virology Centre as the central institute for combating epidemics like the one we experienced last year,” adds Andrej Babiš.

Michaela Koubová

# Not Only Bonuses But Penalties As Well. A Discussion On Better Involvement of Our Clients in Their Own Health Lies Ahead of Us, says the General Health Insurance Company Director Kabátek

Many Czech people still cherish the idea that healthcare is free of charge and that it is the system that should take care of their health. However, zero responsibility goes hand in hand with low effort to care for our own health. As a result, the burden of lifestyle diseases is in many respects higher in the Czech Republic than elsewhere in Europe. Effective but also very costly therapies have been entering the Czech market and the healthcare system will soon become unsustainable if nothing has changed. According to the director of the General Health Insurance Company Zdeněk Kabátek, we are thus facing a difficult discussion. If a properly informed insured person does not follow recommendations, it will mean a greater financial burden for him or her, said Kabátek at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare, which took place on 22 July in Prague.



Also watching from the front row are Katarína Cséfalvayová, former Chair of the Slovak Parliament's Foreign Affairs Committee and Director of the Institute for Central Europe (second from the right) and Martin Fedor, Chairman of the Institute's Board of Directors and former Minister of Defence of the Slovak Republic (third from right). Photo: Radek Čepelák



Photo: Radek Čepelák

“In the last few years I have often faced the question on how to ensure the sustainability of the Czech healthcare system as medicine development is fast and new treatment methods, which are very successful but also very expensive, have been entering our reimbursement system. The logic answer is simple. If we manage to influence the behaviour of those participating in our public health insurance system, convince them to approach their health responsibly and involve them in the treatment costs they generate due to a disease which developed as a result of their certain conduct, we will ensure the sustainability of Czech healthcare. Then the costs will be reduced significantly as they are largely a result of the clients’ behaviour at a certain stage of their lives,” says Zdeněk Kabátek, Director of the General Health Insurance Company (Všeobecná zdravotní pojišťovna - VZP).

Let us recall that VZP reimburses prevention and treatment covered by the public health insurance system from its General Fund. Currently, the annual amount reimbursed is around CZK 200 billion. In addition, the company has a Prevention Fund that reimburses uncovered preventive care and activities paid by the clients. In 2019 (the last year not affected by the Covid-19 pandemic), it distributed over half a billion crowns.

“We have tried to define the main themes and pillars around which we want to promote prevention. We have cardiovascular diseases, which are the biggest killer, oncological diseases, which significantly affect the lives of our clients and are the cause of premature deaths; but we also target psychological diseases and chronic diseases like diabetes,” Kabátek lists the targets at which the company aims.

### **Changes need political courage**

If we succeed in identifying where the client behaviour can be changed and thus costs of future treatment reduced, the latest technologies become also accessible. At the same time, however, a model needs to be found in order to induce insured people to change their behaviour.

“In the future, it will not be possible to maintain a model in which the state or the insurance company is responsible for the health of our citizens. Everyone is responsible for themselves. We should reflect this in the manner we finance healthcare. We should be able to establish a path where the clients are aware that if they have enough information on how to influence their health and cost of their healthcare, they need to be involved financially



Photo: Radek Čepelák

as well. We are currently working intensively with the Ministry of Health and the Office of the Government on this project,” says Zdeněk Kabátek.

As regards this awareness raising, oncology should come first. This should be followed by a second phase, which will require greater political courage. According to Kabátek, the system should start functioning in such a way that if people do not follow recommendations, it will result in a greater economic burden for them personally.

“It is about being able to convert health insurance in a way where, in addition to the bonuses that insurance companies provide to their clients as part of preventive programmes stimulating a healthy lifestyle, we must also be able to apply penalty fees. It will be a big task. However, if we want to maintain the quality of our system, there is nothing else we can do,” Kabátek believes.

### **Individual health insurance plans and client involvement in reimbursement need to be discussed**

Yet, small fines or penalties for inappropriate behaviour are a course that many experts would rather

avoid. Instead, they would prefer positive incentives. And they do not talk just about the aforementioned prevention funds when people have to pay first for their selected activity and only later are reimbursed by the insurance company.

“I myself have been in favour of bonuses and in the current situation, there is no other way. Legislation does not allow us to sanction a client for smoking or using addictive substances. However, the discussion on clients and their share in the costs at the moment when they have the opportunity to be informed and know how to behave to prevent the disease will undoubtedly come up. Paying out bonuses to clients brings no significant results and leads to no changes in their lifestyle. This is also due to the actual availability of resources: if we pay around CZK 200 billion for healthcare and the prevention fund is around 750 million, it is not much to motivate with. In near future, discussion will be held on the application of insurance models that are not yet on the market. Namely on individual health insurance plans and greater or lesser involvement of clients in the reimbursement system,” adds Zdeněk Kabátek.

Michaela Koubová

## Investments into Prevention are Hard to Put Through. Returns Cannot be Expected in One Election Period, says Former Slovak Minister Richard Raši

If we do not support prevention measures, both the Czech and the Slovak healthcare systems will not be sustainable in the future. However, though no politician would deny the benefits of prevention, putting through investments into such measures is extremely difficult. As a rule, returns cannot be expected within one election period, so the benefits are often enjoyed by a different government than that which passed the investment measures in the first place. Ministers of health that put through these measures thus need to have clear data at hand proving the efficacy of such measures. They could be helped if examples of best practice would be collected from throughout the EU, which could illustrate the returns on such investments. This is what deputy and member of the Health Committee of the Slovak National Council and the former Slovak Minister of Health Richard Raši told the international panel of the Zdravotnícký deník Permanent Conference on Czech Healthcare, which was held on 22 July in Prague.



“Dealing with problems related to the coronavirus side-tracked important components of healthcare such as planned operations but also prevention. And as former Minister of Health from 2008 to 2010, I must say that even though no one doubts the need of investing into prevention, it always tends to be a problem when planning the budget. It is also problematic because the investments into prevention often come with benefits that go beyond the political election cycle of each government. I have personal experience with this - when planning the budget, I had to exert major efforts to convince the Minister of Finance that investments into prevention will be accompanied by such benefits that will only be witnessed after the governments change. Thus, the political benefit will not be enjoyed by the person who made the investment,” Richard Raši stated.

Nevertheless, investments into prevention are neutral items in terms of the budget, plus, they usually pay off and have returns. According to the study of the National Academy of Sciences, which analysed investments into prevention in the amount of three percent of the finances allocated for healthcare, savings reaching 3.1 percent and up were observed. Investments into prevention are thus something that is advantageous for the state budget from the middle- and long-term perspective.

However, according to the data of the OECD, Slovakia invests less money than average into prevention – only about one percent of all money allocated for healthcare. In contrast, in other countries of the EU, three percent is the norm. According to Raši, Slovakia also made the mistake of not taking advantage of the National Recovery Plan, in which zero finances were eventually set aside for prevention, although at least EUR 700 million was available.

“While providing free healthcare as it is in Slovakia and the Czech Republic, we cannot maintain the system in the long-term without prevention and understanding it in its entire context,” Raši explained.

## **HLAS wants to base its healthcare programme on harm reduction**

Raši is a member of the HLAS – sociálna demokracia (Voice – Social Democracy) Party, which, although presently the strongest party in Slovakia, is in the op-

position. This party wants to base its healthcare policy programme on harm reduction, i.e., on reducing risks.

“In this context, the value of money is extremely positive. This will also be a compelling argument for Slovakia to deal with prevention to at least the same extent as elsewhere in the EU. A shining example for us is also the Czech Republic, at least in the fact that it adopted the National Strategy for Prevention and Harm Reduction in Addictive Behaviour for the period of 2019 – 2027. We lack this in Slovakia,” Richard Raši stated.

Raši has already experience with putting through preventive measures in the sense that thanks to him, legislation prohibiting smoking in businesses where food is served was passed in Slovakia in 2009. “On the other hand, I have to say that now we need to find a suitable extent and mix of prohibitions and restrictions, combined with motivation. In harm reduction, solving problems using restrictions only does not bring about an ideal effect, and can even have the opposite effect,” Raši pointed out.

## **Penalise less, help more**

According to Raši, current recommendations to governments in terms of prevention say that the state should penalise less but help more. “This is the unavoidable path that we must take so that prevention shall not only become a part of our systems, but also of our lives,” Richard Raši stated.

Aside from this, the government should take advantage of scientific evidence and innovations. Even though each country today has massive amounts of data available to them, only a minimal amount is used – something that has to change in this digital age. The third recommendation is that if we cannot eliminate the harmful behaviour of people, we have to search for means to at least curb it naturally, in a non-violent way.

“As for Slovakia, we are preparing a programme of extensive public debates on prevention, harm reduction, and motivation to lead a healthy lifestyle. Even though no one really doubts prevention, we still tend to talk more about it than actually carrying the measures through. If we want to maintain or increase the level of healthcare, we have to begin with prevention. This is actually the best and cheapest way, rather than treating the consequences later,” Raši pointed out.



Photo: Radek Čepelák

HLAS – sociálna demokracia (Voice – Social Democracy) therefore hopes to successfully put through the idea that when creating the state budget, a predefined percentage that will be collected from the excise duties on cigarettes and alcohol will be returned to the healthcare system, or that it will support public health, respectively. The party intends to try putting this step through already when creating the next state budget.

### **Supporting exercise can help the Slovak Republic save up to EUR 300 million**

Prevention efforts could also be boosted if data and examples of best practice from throughout the EU would be collected in one place. Thus we would have a cohesive summary of what we have already been able to achieve in terms of prevention, what has worked, and what investments brought such efforts to fruition the most. Thanks to this, those countries that have been struggling with prevention efforts for years could be inspired, and they would not have to produce ideas that are already functioning elsewhere. At the

same time, health ministers would gain arguments to use when creating the state budget, so that they will be able to defend the idea of economic returns.

As for reducing harmful consequences of non-communicable diseases, specifically, promotion of regular physical activities can bring savings of up to 10 percent. In this manner, Slovakia could annually save up to EUR 300 million which is over five percent of the budget for Slovak healthcare, set at six billion euro.

“At present, we can promote preventive measures by not just convincing the minister and Prime Minister, but also through the pressure applied by politicians in general. We can provide examples of best practice and specific benefits of investments into prevention for the whole healthcare system. If we are able to get this to media and create public pressure, investments into prevention, unavoidable if we wish to ensure a healthier life for our citizens, will be successful,” Raši concluded.

Michaela Koubová



Greetings from the Slovak Minister of Health Vladimír Lengvarský. Photo: Radek Čepelák



The international panel is watched by (from the left) Helena Sedláčková, a journalist for Zdravotnický deník, Martin Fedor, Chairman of the Board of the Institute for Central Europe, former Head of the Foreign Affairs Committee of the Slovak Parliament and Director of the Institute for Central Europe Katarína Cséfalvayová, and the publisher of Zdravotnický deník Ivo Hartmann. Photo: Radek Čepelák

# It Is Easier to Sell One Saved Life than One Million Terminal Diseases Avoided Due To Prevention, Says Slovak Deputy Záborská

As a rule, results of preventive measures are seen only after several years. This is also one of the main problems why a number of politicians does not focus on putting them through - their goal is to collect quick political points, not long-term benefits that they cannot yet boast of during the next election. Plus, as a part of prevention, we often have to tell people unpleasant things, which many politicians are loathe to do. Those aware of the importance of prevention should thus do everything possible to put such measures through and support them at every chance, emphasises Anna Záborská, the Vice-Chair of the Health Committee of the Slovak National Committee, at the international panel of the Zdravotnícký deník Permanent Conference on Czech Healthcare, held on 22 July in Prague.



Anna Záborská's presentation listened to by (from the right) President of the Czech Society of Atherosclerosis, Michal Vráblík, President of the Czech Society for Oncology, Head of the Department of Oncology, Second Medical Faculty of Charles University and Motol Faculty Hospital in Prague, Jana Prausová, Deputy Director, General Health Insurance Company, Ivan Duškov, Head of Association of Outpatient Specialists, Zorjan Jojko, Director of National Institute of Health, Barbora Macková, founding member of the Association of General Practitioners Czech Republic, Zdeněk Hamouz, and Director of National Institute of Mental Health, Petr Winkler. Photo: Radek Čepelák

“We have been facing a rapid increase of healthcare costs in the long-term, and we all know what that is like during the Covid-19 era. Our systems are under great pressure to ensure continuously higher quality healthcare for the ageing population. The impacts of national budgets are well-known - we invest more and more into healthcare, but the effects are only very slowly observed; it's as if we were holding a cat by its tail. On the other hand, the discussion on prevention has been around for decades, and we can see the results of preventive measures in several countries. They are not always positive but sometimes there is significant improvement, and they also have positive consequences in terms of treatment requirements. Of course, the average lifespan during which one has no health problems is extended by such measures, which in turn affects costs for the long-term care of senior citizens. However, ageing and the need for assistance is not reduced, on the contrary. Yet, this is something that we want, and it is not something that we need to perceive negatively, even though it has an impact on our budgets,” Anna Záborská said.

This is the reason prevention should become one of the pillars of healthcare policies. Of course, the fundamental question remains of how to make prevention a priority and mobilise political and public support in its implementation.

“It is easier to sell one saved life than one million terminal illnesses that were avoided thanks to prevention. I believe this to be a political problem, especially when

the pressure for quick, short-term solutions and the collecting of fast political points have priority. This is the task for us politicians. I confess that the only answer I have is that those of us who emphasise the common good in politics have to continue in their efforts, adopt the topic of prevention, and talk about and put it through at every chance,” said Záborská. She added that prevention is the correct path to one's own health, as well as to the health of public finances in healthcare.

Záborská found the situation in France in the 1980s, when up to ten thousand people died in car accidents, to be a positive example. Strict measures were implemented due to the high mortality, which ten years later resulted in the decrease of number of victims to under four thousand. However, the change that saved six thousand lives a year was a process that lasted two and half election periods.

“Implementing preventive measures tends to be a significant problem, as their results usually manifest after more than one election period. Politicians ask themselves: what will we tell our voters in four years' time during elections if the results are not yet obvious,” Anna Záborská emphasised. “Therefore, politicians find prevention concepts to be remote. They are convinced that preventive measures are expensive, bring about few results, take a long time, and are not completely in line with the role of public health, and it is difficult to demonstrate its results within one elec-



From the right: the editor-in-chief of Zdravotnický deník and the host of the discussion, Tomáš Cikrt, President of the Polish Society for Public Health, Head of the Department of Allergology, Lung Diseases and Internal Medicine, Central Clinical Hospital in Warsaw, Andrzej Mariusz Fal, President of the Czech Society for Cardiology, Head of the Department of Cardiology and Angiology, First Medical Faculty of Charles University and the General University Hospital, Aleš Linhart, Director of the General Health Insurance Company, Zdeněk Kabátek, and the Head of the National Monitoring Centre for Drugs and Addiction, Viktor Mravčík. Photo: Radek Čepelák



The pressure for quick, short-term solutions and the collecting of fast political points have priority over the long-term benefits of investments into prevention, says Deputy Záborská.

tion period. Despite this, I believe that 21st-century medicine should primarily be preventive medicine,” Záborská added.

At the same time, it is necessary to focus on other reasons why preventive measures have failed to date - whether the number of, qualification of, or bonuses for healthcare staff, badly organised care, or a badly educated population are at fault.

### **Prevention often means giving unpleasant news**

Although the consequences of preventive steps are not immediately visible, Záborská believes that their economic aspect should be judged just like treatment measures. At the same time, we should approach investments in prevention primarily in terms of their non-financial benefits. After all, if we are to prevent any sort of phenomenon, we have to know its causes. We must say whether and how we can prevent a phenomenon based on medical findings.

“The prevention of unwanted phenomena in healthcare has also to be performed at the economic, political, legal, media, and other levels, not just in providing healthcare. The fact that the prevention of many undesired phenomena is unpopular, in the sense that we should convey a true picture of the causes of the given problem to the population and to politicians, can also be problematic. It often means reporting unpleasant news. With harm-

ful and undesired phenomena, preventive measures are absolutely clear and self-evident in terms of health (e.g., measures associated with lockdowns or quarantine) but they are unpopular among the population, so they are not implemented, or they are implemented in a limited form. You see, politicians want to bring the good news only,” Anna Záborská pointed out.

### **Economic interests may play a role in suppressing preventive measures**

According to Záborská, economic interests of a wider or narrower group may similarly take precedence over implementing preventive measures - for example, these could be the interests of cigarette or alcohol producers. The issue is then presented to the public by doubting health facts, making light or fun of the prevention, and by foisting half-truths, disinformation, and hoaxes.

“The possible result is that the officially declared programme of prevention in healthcare can merely be a Potemkin village, a formality, and an untrustworthy matter. Such formal preventive measures have to be avoided, as they throw a bad light on healthcare workers and on the healthcare system, create a feeling of distrust towards healthcare, and often throw doubt on it,” Záborská stated.

However, a solution could be the implementation of cross-border programmes of prevention which could be applied in more than one country. These could pertain to, for example, tobacco, alcohol, or illegal drugs, to which today, each country assumes a different stance.

“I would consider the more intense capture and punishment of dealers or eventually helping those victims already addicted to drugs to be a form of prevention, but we should do so with cross-border efforts, identifying groups at risk of eventually succumbing to addiction across Europe. It is like a tree with its trunk, crown, and roots. We usually only deal with the leaves or fruit of the trees, but not with the roots, that is, the individuals who become addicted in certain life situations. No one pays attention to them. If we do not feed the roots, then we will not even have leaves,” Záborská concluded.

Michaela Koubová

# The Battle with High Cholesterol is Boycotted by Social Trends and Disinformation, Cardiologist Vrablík Points Out

In most cases, cardiovascular incidents caused by atherosclerosis can be prevented by leading a healthy lifestyle. Despite this, the hardening of arteries is the most frequent cause of cardiovascular diseases today, ranking in first place in causes of death in the Czech Republic. In addition, the situation is also complicated by the fact that if one is not able to treat high cholesterol levels (without which atherosclerosis cannot develop) by changing one's lifestyle, the implementation of time-tested treatment, i.e. statins, is in turn hampered by disinformation. President of the Czech Society for Atherosclerosis Michal Vrablík, also of the 3rd Clinic of Internal Medicine - Endocrinology and Metabolism at the First Medical Faculty of Charles University and the General University Hospital in Prague - stated the aforementioned at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare.



All cardiovascular incidents caused by atherosclerosis can be prevented, says President of the Czech Society for Atherosclerosis Michal Vrablík. Photo: Radek Čepelák



The concentration of blood cholesterol is a parameter that we can influence and which is the basis of successful preventive cardiology, said Vrablík. Photo: Radek Čepelák

“A number of cardiovascular incidents can be prevented. And the ones that can be prevented are those caused by atherosclerotic vascular processes,” professor Michal Vrablík stated.

According to him, every one of us has atherosclerosis because it is a process that begins soon after birth and develops at individual speed depending on the pressure exerted by risk factors. Those who take care of their health need not be bothered by the disease as it remains in its initial and reversible stages, and not in its late stages which lead to occlusive vascular disease and force patients to get emergency treatment at coronary or stroke units.

For example, smoking or diabetes greatly contribute to the development of atherosclerosis. However, atherosclerotic diseases cannot originate without a supply of cholesterol to the vessel walls. Thus, a prerequisite for the development of atherosclerosis is dyslipidaemia.

“Thanks to a number of studies, we know today that those of us who are lucky and are genetically constructed to have a very low concentration of blood cholesterol, live their entire lives without developing diseases dependent on atherosclerosis. People who innately have very low concentrations of cholesterol have practically zero risk of suffering a stroke or myocardial infarction as the result of atherosclerotic vascular damage,” Michal Vrablík pointed out.



We have to ask ourselves why only about 50 percent or less of the population takes advantage of preventive check-ups, why they are not promoted and why they are not properly implemented in all doctor's offices, Vrablík remarked. Photo: Radek Čepelák

The concentration of blood cholesterol is also a parameter that we can influence and which is the basis of successful preventive cardiology. Thanks to this, the death rate from cardiovascular causes has decreased; however, this trend stalled several years ago. “We did experience a dramatic fall in the population's cholesterol levels; however, in the approximately past ten years, the average cholesterol level has not changed. And it is a level that is assuredly significantly higher than what we currently consider to be the optimum,” Vrablík emphasised.

But in fact, we now have recommendations available that clearly identify the optimum and risk values. With young people, the low risk does not exceed three millimoles per litre whereas 1.4 millimoles per litre is recommended for patients after myocardial infarction. In contrast, the average Czech has about 3.5 millimoles per litre.

### **Fast food is cool but contrary to a healthy lifestyle**

For the situation to improve, the main responsibility in terms of cardiovascular health should transfer from physicians to the society. Therefore, politicians, health insurance payers, public servants, regulators, and others should assume an active role in which they contribute to changing the norms of the population so that an anti-sclerotic regimen becomes commonplace.

“This is rather difficult because what is now ‘cool’ is a diet found in fast food restaurants. This is in abso-



From the right, the editor-in-chief of Zdravotnický deník and the host of the discussion Tomáš Cikrt, President of the Czech Society for Atherosclerosis Michal Vrablík, President of the Czech Society for Oncology, Head of the Department of Oncology, Second Medical Faculty of Charles University and Motol Faculty Hospital in Prague Jana Prausová, Deputy Director, General Health Insurance Company, Ivan Duškov, Head of Association of Outpatient Specialists Zorjan Jojko, Director of National Institute of Health Barбора Macková, founding member of the Association of General Practitioners Czech Republic Zdeněk Hamouz, and Director of National Institute of Mental Health Petr Winkler. Photo: Radek Čepelák

lute conflict with what we recommend as a healthy lifestyle,” Michal Vrablík emphasised.

In this sense, the pillar of preventive measures should be physical activity and a healthy diet. If, however, optimal levels are not achieved through regimen, which, according to Vrablík, is usually the case with high and very high-risk patients, medicinal preventive care steps in, which also includes pharmacotherapy.

“The Czech Republic is not so badly off in this sense. The main medicines used to influence cholesterol levels and cardiovascular prognoses are widely available. Of course, the situation could always be better and we shall strive to make innovative, modern, and often rather expensive treatment available to the specialised group of patients for whom basic treatment is insufficient,” Michal Vrablík pointed out.

### The media also at fault

Sadly, this issue has been significantly affected by disinformation introducing doubt to the benefits of statin-based treatments. “I know of no other field of medicine that suffers so much from disinformation campaigns like the influence of cholesterol levels. We have been using statins in clinical practice for forty years now and the treatment is evidence-based. Those that say that they need further proof of whether long-term use is sa-

lubrious and not detrimental will never get it - no more data can be discovered. Despite this, it is a popular discussion topic, also because more than 1.2 million people in the Czech Republic use statins. Therefore, it pertains to a huge proportion of the population. Sadly, though, if you write that statins are great and have ideal beneficial effects, then no one will read it. But if you write: we have discovered that not everything is the way doctors would have you think, and the new information is alarming - then practically everybody will read it,” Vrablík claimed.

Despite this, Vrablík believes that we are doing well, even also in terms of organised care. Nevertheless, preventive care should be in the hands of general practitioners, and this also applies to children. If we are not successful in implementing anti-sclerotic strategies that already start in childhood or adolescence, there is a much smaller chance that we will be successful later.

“Preventive care, at least the medical part, is well-organised in the Czech Republic. I think that legislative conditions and insurance coverage are generously established. However, we have to ask ourselves why only about 50 percent or less of the population takes advantage of preventive check-ups, why they are not promoted, and why they are not properly implemented in all doctor’s offices,” Michal Vrablík concluded.

Michaela Koubová

# Prausová: All Should Know First Warning Signs of Tumours By Heart

The number of oncological patients continues to grow, and malignant tumours are being found in younger and younger patients. Many problems can be prevented by early detection within the system of national screening programmes, but these are not self-redeeming. Therefore, primary prevention and regular check-ups by general practitioners, which can detect the first symptoms of the disease, are highly important. In the Czech Republic, oncological care is at a high standard and widely accessible; however, a psycho-social supportive environment and the interconnection of health and social care is lacking, President of the Czech Society for Oncology Jana Prausová declared at the international panel of the Permanent Conference on Czech Healthcare, held on the topic of the economics of prevention.



“Let us not promise what we cannot fulfil,” said Jana Prausová. On the left, Deputy Director, General Health Insurance Company, Ivan Duškov, on the right, President of Czech Society of Atherosclerosis Michal Vráblík. Photo: Radek Čepelák

Every third person in the Czech Republic will fall ill with some type of malignant tumour, oncologists warn. Many problems can be prevented with early detection within the system of national screening programmes, but these are not self-redeeming, pointed out Jana Prausová, President of the Czech Society for Oncology and Head of the Department of Oncology, Second Medical Faculty of Charles University and Motol Faculty Hospital in Prague. “There are interval carcinomas that can grow even in the period between two mammograms. Let us not promise what we can-

not fulfil,” she warned at the international panel of the Permanent Conference on Czech Healthcare, held on the topic of the economics of prevention.

Thus, she believes that regular check-ups by general practitioners play an irreplaceable role. Doctors know how to ask the right questions and recognise that their patient is not feeling well. They can discuss warning signs of cancerous diseases together. “Patients should know these signs by heart - changes in their weight, unstable body temperature, night sweating, skin



Předsedkyně České onkologické společnosti a přednostka onkologické kliniky 2. lékařské fakulty Univerzity Karlovy a Fakultní nemocnice Motol Jana Prausová. Photo: Radek Čepelák

changes, changes in bowel movement stereotypes, presence of blood where it should not be found, and what to do. Then, they come to their doctor with these inconspicuous changes in their behavioural habits and in what they are feeling,” she stated.

According to her, this type of prevention is more important than, for example, blood tests looking for oncological markers as part of preventive check-ups. “It is necessary to realise that if no tumour is suspected at the moment patients leave their GP’s office, this need not be true in several minutes time. Therefore, any sort of symptom or irregularity is a reason for another visit to your doctor,” the oncologist pointed out.

## The number of patients is on the rise

Each year, 85,000 people fall ill with malignant tumours in the Czech Republic, and the numbers continue to rise. In 2030, the prevalence is estimated at 750,000 people. Approximately 27,000 of them die because of these malignant tumours. Luckily, thanks to across-the-board screening programmes and high-quality and widely accessible oncological care, the death rate is growing at a much slower pace than the rate of new patients. Even so, malignant tumours remain the second-most-frequent cause of death, and according to estimates, could switch places with still dominant cardiovascular diseases to take first place by 2035.

Most often, oncologists treat patients in the age group of sixty to seventy years of age. However, this by no means indicates that younger people do not get tumours. “Colorectal carcinoma, breast carcinoma, carcinoma of the kidneys, or carcinoma of the pros-

tate are easily found in people just over 40 years of age. Therefore, it is very important to talk about prevention,” Prausová explained.

In females, the most frequent diagnosed tumour is breast cancer, and with males, it is primarily prostate cancer. The next in line for both genders are colorectal cancer and lung and bronchial cancer. “In terms of mortality, the lungs are in the lead since we still do not completely know how to treat them. This will hopefully improve with the advent of innovative immunotherapy. The results of adjuvant therapy are promising,” Prausová added.

There is also a gradual increase in melanomas and carcinomas of the prostate, the thyroid, and the oesophagus. On the contrary, cervical cancer cases have been decreasing. “Here, regular gynaecological check-ups probably played an important role, and I hope that the effects of HPV vaccinations are beginning to manifest. This is the best type of prevention - preventing something from even originating,” she added.

## Even early detection might not help

“Today, we no longer dominantly classify tumours according to their size,” Prausová further explained. “Now we classify them according to their molecular-genetic and immunohistochemical classification, and to their degree of risk according to the character of their growth, development, and potential to metastasise. Let us thus not overestimate the fact that we can detect a tumour early. This need not be completely relevant on whether it will turn out well. Regarding the size of the tumour, even early stages can kill. The informed public must be aware and vigilant about this.”



“The best prevention is the type that prevents disease from ever developing.” Photo: Radek Čepelák

At present in the Czech Republic, there are three across-the-board screenings to which health insurance companies personally invite their clients. According to Prausová, breast cancer screenings have an attendance of 60 percent of the targeted population, 30 percent attend colorectal cancer screenings, and 60 percent attend cervical cancer screenings. Still a lot remains to close the gap. At least, according to Prausová, the Covid-19 pandemic has yet to make a significant dent in these numbers, although some estimates thought it would substantially reduce the attendance of these programmes. “The decreased attendance rates were always short-term, and the numbers rapidly went back. We need not yet be worried, as to date we do not have any relevant data for it,” the oncologist placated the audience.

Starting next year, a new screening for lung cancer will also be carried out among smokers with twenty pack-years (1 pack-year = 20 cigarettes daily for a period of one year or 10 cigarettes daily for a period of two years, etc.). “Here, however, it is somewhat problematic, because one has to tell the truth about the extent of their smoking. And we cannot entirely depend on their truthfulness,” Prausová pointed out.

### **Oncological treatment is at a high standard, but a psycho-social supportive environment is missing**

As already mentioned, oncological treatment in the Czech Republic is at a very high standard and widely accessible. The two national oncological centres in Prague and Brno are complemented by a network of complex oncological centres located in all regions, except for the Karlovy Vary Region. “There is no one

there to run it,” Prausová laconically explained, and she added: “We can construct the building but we cannot fill it with experts. They are all going west.” Prausová also believes that we also have big gaps in the psycho-social supportive environment for oncological patients. “Health and social care are not interconnected in our country, which is absolutely wrong in terms of chronic diseases,” the oncologist asserted.

Prausová believes that patient care must be organised in the aforementioned centres: “Oncological treatment is holistic medicine. It has to be linked to a larger hospital. We need all experts, such as cardiologists, diabetologists, eye or ORL doctors, and more, including emergency doctors and intensive care units. Only thus can we treat patients as they deserve to be treated and as their comorbidities require.” All depends on early diagnostics and multi-disciplinary teams. Therefore, they must be concentrated into the units of large university hospitals.

“Only then will oncology make sense, and I am insistent on this,” Prausová concluded; by which she indirectly opposed the argumentation behind the already adopted plan of Prime Minister Andrej Babiš to construct the Czech Oncology Institute. This is to be built in Prague on the premises of the Královské Vinohrady University Hospital at the area of an originally planned trauma centre. The Czech Society for Oncology has long been criticising this project which will cost seven billion crowns, financed by the National Recovery Plan.

Helena Sedláčková

# Mental Health Literacy Is Low in the Czech Republic and Many Are Unaware of Their Serious Illness Says National Institute of Mental Health Director Winkler

During the Covid-19 pandemic, mental in the Czech Republic has increased threefold and anxieties twofold. Hand in hand with this, the number of people who are not dealing with their problems has grown. This applies not only to common mental illnesses but also to more serious conditions, such as psychoses and bipolar disorders. Poor health literacy is largely at fault since the patient and quite often the people close to them do not reveal the patient's illness. In addition, programmes focused on mental health in schools or at employers, or projects aimed at the early detection, for example, of serious mental illnesses or dementia, can be helpful in prevention: as said by Petr Winkler, Director of the National Institute of Mental Health, at the international panel of the Permanent Conference on Czech Healthcare held on 22 July in Prague.



NIMH Director Petr Winkler's speech listened to by (right to left) Tomáš Cikrt, Zdravotnický deník Editor-in-Chief and discussion host, Michal Vráblík, President of the Czech Society of Atherosclerosis, Jana Prausová, President of the Czech Society for Oncology and Head of the Department of Oncology, Second Medical Faculty of Charles University and Motol Faculty Hospital, Ivan Duškov, Deputy Director of the General Health Insurance Company, Zorjan Jojko, Head of the Association of Outpatient Specialists, Barbora Macková, Director of the National Institute of Health, and Zdeněk Hamouz, founding member of the Association of General Practitioners. Photo: Radek Čepelák

“Mental illnesses are highly prevalent and pose an enormous burden – both medical and economic – as they are productive age and childhood illnesses. Prevention, early identification, and treatment are key to limiting their negative impact. Mental health literacy is fundamental for prevention and timely identification,” Petr Winkler states.

Regretfully, literacy in this area is low and many people with serious problems do not receive treatment because they do not realise that something is wrong. As an example, Winkler describes the case of a patient who, for two years, hardly ever left his flat and spent most of his time in bed, seriously considering suicide. He was sent to a psychiatrist by his general practitioner who was to issue a medical certificate for his driver’s licence. It is necessary to increase literacy from childhood – many children have friends suffering from depression or self-harm but they do not know how to react.

Anyway, these are not exceptional cases. Today, one in five children aged between 3 and 17 years suffers from a mental illness, the cost of which amounts to approximately 250 billion dollars per year according to estimates of American experts. Prevention in childhood is important also due to the fact that three quarters of mental illnesses in adults begin before the age of 18 and one half before the age of 15. Unfortunately, another fact is that suicide is one of the most frequent causes of death among children and adolescents.

Over the past years, the rate of mental health prob-

lems in children has been growing. “In the Czech Republic, we witnessed an 85 per cent increase in the psychiatric outpatient treatment of childhood and adolescent developmental disorders between the years 2007 and 2017,” claims Petr Winkler.

Prevention in this area is rather complex. It may involve universal or selective interventions in early childhood, such as the screening of mental health disorders during pregnancy and after childbirth, or interventions to promote mental health and prevent emotional or behavioural disorders.

“Programmes implemented in schools prove to be instrumental. In this respect, we differ slightly from our other colleagues, since our competence falls more within the sectors of education, business, and social affairs than healthcare. Such programmes oriented on mental literacy and social learning exist and are effective both in terms of improving the overall well-being symptoms and in the prevention of suicide among children,” Winkler points out.

The National Institute of Mental Health has actually developed such a programme. It is named “Všech pět pohromadě” (On My Mind) and is now in the testing phase. Tests are also ongoing of Triple P (Positive Parent Program), a selective programme focusing on improving the skills of parents, as well as on the emotional and behavioural abilities of children in families with mental illness.

Moreover, there are interventions targeting intellectual disability. These are based, for example, on accident



“Mental health literacy is fundamental for prevention and timely identification,” says Petr Winkler, NIMH Director. Photo: Radek Čepelák

prevention, or oriented on families where social and pathological phenomena may occur, such as child abuse or alcoholism.

## Employers do not seem to be very open to mental health programmes

Common mental illnesses in the overall population, such as depression or anxieties, are one of the main causes of disability worldwide (depression ranks first, anxiety disorders rank sixth). In terms of productivity loss, these disorders cost trillions of dollars per year (in the Czech Republic alone, depression-related costs amounted to EUR 1.3 billion and anxiety disorders to EUR 0.9 billion in 2010). Concurrently, depression is the most frequent cause of suicide (around 800,000 occur around the world annually).

“What concerns us far more than other fields is the so-called ‘treatment gap’, meaning the untreated population, which amounts to 60 or even up to 70 percent with depression and anxiety in the Czech Republic. Moreover, in the situation brought about by the Covid-19 pandemic, the lockdowns, and other negative consequences, we saw a dramatic increase in the incidence of common mental illnesses among the population. The number of people suffering from depression tripled as did the number of people at risk of suicide, and the number of people suffering from anxiety disorders doubled and, naturally, the untreated population also grew,” Petr Winkler claims.

As regards prevention, the key partners are employers along with mental health programmes at

the workplace. Based on available evidence, these programmes are effective in reducing depression, anxiety, and stigmatisation.

“In the Czech Republic, the business sector does not seem to be very open to this idea. They know that the topic concerns them, yet they think that they will solve it by making psychological care available to their employees. But what will the employee think? ‘The bastards are trying to catch and identify me as a weak point of the organisation. I am not going there.’ We need to work with the entire culture of the organisation so that people accept such care,” Winkler explains. At the same time, we need to improve the approach towards employees with mental health problems. This is also an aspect that preventive programmes help improve.

Promoting such preventive programmes is actually paying off. According to cost-effectiveness studies, one dollar invested in this area generates four or five in return. Another means that helps promote mental health are e-mental health tools. During the Covid-19 pandemic, NIMH launched the Czech screening website [opatruj.se](https://opatruj.se) where more than 50,000 people have already screened themselves. The website has been visited by over 120,000 users, most returning on a regular basis.

## Serious illnesses remain untreated for a long time

The prevalence of serious mental illnesses, such as psychoses and bipolar affective disorders, is lower than with depression and anxieties – and they affect 1.5 to 3.0 percent of the population. Concurrently, these



If our country had functioning early detection and intervention programmes in the area of mental health, the costs per patient would drop by 40 percent according to Petr Winkler. Photo: Radek Čepelák



Photo: Radek Čepelák

illnesses are associated with higher disability and social costs, whereas around EUR 1.3 billion were attributable solely to psychoses in the Czech Republic in 2010.

“There is also a high treatment gap and a long period of untreated illnesses. These people wait for many years. They often think that what they are experiencing is normal. And they are not the only ones, often their intelligent and educated parents share their view. Another problem associated with serious mental illnesses is the high institutionalisation in the Czech Republic, as well as in other countries of Central and Eastern Europe. During the Communist regime, the diagnosis of schizophrenia meant that the individual was sentenced to lifetime confinement at psychiatric hospitals, which, of course, increased costs expended on care,” Petr Winkler describes.

Prevention in this area mainly consists in averting severe progress, as well as the relapse of an illness. Early detection and intervention programmes serve this purpose and they are not only efficient, but also cost-effective compared to follow-up treatment costs.

“If our country had functioning early detection programmes, the costs per patient would drop by 25 percent, if we had early intervention programmes, the costs would drop by 33 percent, and if we had both, costs would drop by 40 percent. In response to this, we are piloting severe mental illness early intervention teams within the framework of psychiatric care reform in three Czech regions,” Winkler states.

## Lack of Systematic Cost-Effectiveness Assessments

Another chapter that we should focus on within prevention is Alzheimer’s disease and similar illnesses. Around the world, dementia occurs in 5 to 8 percent of

individuals over 60 years old, which roughly amounts to 50 million people. In 2030, it should be 82 million and 150 million in 2050. About nine percent of cases occur before the age of 65. The worldwide costs are estimated at USD 800 billion and in the Czech Republic alone they amounted to EUR 0.9 billion in 2010.

Prevention consists in reducing risk factors, e.g. low physical activity, alcohol, obesity, smoking, unhealthy diet, high blood pressure and cholesterol, mental inactivity, poverty, depression and social isolation.

Secondary prevention involves early detection. “A modelling study allowed us to estimate that lifelong costs expended on the care of an individual suffering from dementia in our country would be reduced by EUR 27,000 among women and by EUR 23,500 among men, if we had functioning early interventions,” comments Winkler.

As evident from the data above, many calculations have already been made in the area of mental health and they are supported by Czech data. The good news is that healthcare payors and other authorities are genuinely interested in these data. “Such levels as we see in the United Kingdom, Canada or the Netherlands, where they have institutes systematically evaluating the cost-effectiveness of interventions and where they ensure that the invested means – not only financial but especially human – provide maximum benefit, are still beyond our reach. I consider it one of the most important steps to be taken in the area of public health,” Petr Winkler emphasises.

To summarise, there are still considerable gaps that we need to overcome in mental health prevention. “Although the availability of preventive programmes is on the rise, there is plenty of room for improvement,” Winkler concludes.

Michaela Koubová

# Prescription Restrictions are Not Based on Cost-Effectiveness Calculation, Says General Practitioner Zdeněk Hamouz

General practitioners play a key role in prevention. They are the ones who should identify first risk signs, such as high blood pressure, blood sugar or cholesterol, which indicate the risk of developing and progressing chronic diseases. However, since none of these cause pain and the health literacy of Czechs is not very good, as is well known, practitioners often have to push the patient towards prevention when they contact them for completely different reasons. Until recently, however, their job was complicated by the fact that once they identified a risk, they had limited treatment options due to prescription restrictions. This is gradually changing, yet there are no calculations in the Czech Republic on how cost-effective it would be to release additional medicinal products to GP practices. The aforementioned was stated by Zdeněk Hamouz from the Association of General Practitioners at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare.



Speech by the Slovak Minister of Health, Vladimír Lengvarský. From the right, Editor-in-Chief of Zdravotnický deník and the discussion host, Tomáš Cikrt, President of the Polish Society of Public Health, Head of the Department of Allergology, Lung Diseases and Internal Medicine, Central Clinical Hospital of Ministry of Interior in Warsaw, Andrzej Mariusz Fal, President of the Czech Society for Cardiology, Head of the Department of Cardiology and Angiology, First Medical Faculty of Charles University and General University Hospital in Prague, Aleš Linhart, Director of the General Health Insurance Company, Zdeněk Kabátek, and Head of the National Monitoring Centre for Drugs and Addiction, Viktor Mravčík. Photo: Radek Čepelák

“Primary care is absolutely irreplaceable in the field of preventive medicine and is trying to fulfil its role,” Zdeněk Hamouz says. According to the legislation, practitioners can treat patients in 55 diseases, including obesity, prediabetes, and chronic bronchitis. Of course, if they do not know what to do, they should refer the person to a specialist.

Although practitioners (and doctors in general) play a major role in prevention, they must not be left alone. It is the role of the government to provide resources, to moderate and modulate healthcare or set basic objectives in the design of health programmes. Today, we focus primarily on cancer prevention, as well as on cardiology and diabetes prevention, where practitioners cover a wide field of action. In oncology, for example, there has been a recent expansion in the sense that practitioners can take over the follow-up treatment of patients who have completed their cancer treatment, most often breast cancer patients.

However, the main role of practitioners should be in primary prevention, i.e. in trying to prevent chronic disease from developing. For example, data from various studies on the treatment of hypercholesterolaemia have shown that the older patients begin to be treated for a problem, the earlier they die. The same is true of many other lifestyle diseases.

### Late detection equals higher mortality

The trouble is that these patients have no symptoms, so they do not seek doctors. Therefore, as part of preventive check-ups, practitioners test glycaemia, blood pressure

or cholesterol to catch in time those at risk of developing a disease. However, as not everyone attends preventive check-ups, practitioners also try to carry out prevention through other contact, i.e. during initial check-ups, when issuing confirmation for a driving licence or work, or when the patient wants a referral to a specialist.

“The problem of preventive medicine is early detection and treatment. If we are not successful in this regard, the disease develops over a longer period, and leads to higher mortality. This applies to all aspects of preventive medicine. To cholesterol, diabetes and glycaemia as well as to hypertension,” Zdeněk Hamouz emphasises. The results of prevention can be seen very clearly in colorectal cancer, which until recently has been the world’s leading cancer. However, after the introduction of preventive testing for occult bleeding from stools, the figures have improved significantly.

Myocardial infarction, on the other hand, has seen a 13 per cent reduction in cases and a seven per cent reduction in costs over the last ten years. The results are due to improvements in care, lifestyle, or greater wealth in society. However, according to Hamouz, the fact that practitioners were able to start prescribing statins ten years ago also seems to play a role. And while putting in a stent costs around a hundred thousand crowns all-in, a year’s treatment with statins costs 2,500 crowns.

“Despite all the hoaxes and rubbish you can read on the web, statins reduce the risk of heart attacks by at least 30 per cent. If a patient has a positive score, which we judge during preventive examinations, he has to be treated,” Zdeněk Hamouz emphasises.



“Primary care is absolutely irreplaceable in the field of preventive medicine,” says Zdeněk Hamouz of the Association of General Practitioners. Photo: Radek Čepelák



“The problem of preventive medicine is early detection and treatment. If we are not successful in this regard, the disease develops over a longer period, and leads to higher mortality,” Zdeněk Hamouz says. Photo: Radek Čepelák

## Fewer prescription restrictions

The range of what practitioners can prescribe plays a significant role in prevention (especially secondary prevention). Meanwhile, prescribing hypolipidaemic ezetimibe was allowed last year and now GPs can also prescribe gliptins for the treatment of diabetes.

“We may not be able to prescribe incretin mimetics, we only can do so with DPP IV inhibitors, but thank goodness for that. However, we may get to glyphozines in a decade. When I find out a patient has diabetes, I start treatment, and I have the means to do so. But if these medications are no longer enough and I have no other option to prescribe, I have to send them to a diabetologist, which is the end of my role in secondary prevention – and that is not good. I should continue to treat them but I cannot because I cannot get to the medication. We have been fighting for years for some molecules, and eventually changes will happen but there are unnecessary delays,” says Zdeněk Hamouz, adding that in Germany, for example, a GP can prescribe everything.

According to him, there is no calculation of cost-effectiveness and benefits in our country as of today. “I don’t know anyone who would have calculated it downwards. It always follows the same model – a group of specialists do not want a certain medicine to be prescribed by other specialists, and some think it is expensive. But no one seems to be able to calculate whether it is cost-effective in terms of additional costs and life extension,” Hamouz points out.

This is where health insurers paying for treatment should play a role but they should also moderate the discussion among different groups of specialists. They should also cooperate with the State Institute

for Drug Control (SÚKL), which is entrusted with the lifting of prescription restrictions.

## Promoting efficiency is important

The implementation of prevention by GPs may also be constrained by the fact that access to their care in peripheral regions is decreasing. Between 2000 and 2010, hundreds of practitioners in the periphery quit their practices, and some of them have not been replaced. By contrast, Prague added 100 practitioners in that time. “The discrepancy may have adjusted, but there is an irreplaceable role for the health insurance companies. They have to direct doctors to where they are needed, not where they want to go,” Hamouz believes.

At the same time, providers that are efficient should be supported by payers through programme projects. The General Health Insurance Company has already created the VZP Plus programmes, which allocate bonuses to both primary care physicians and specialists for the proper treatment of patients for diabetes, hypertension or obesity. Thus, if a physician manages to treat their patients so that they have the properly glycosylated haemoglobin, blood pressure or LDL cholesterol levels, the physician will receive a financial bonus from the insurance company.

“It all comes down to catching risk factors right at the beginning, when the values are still low, and we can influence them well because people have not yet developed atherosclerosis. Then, when they already have diabetes, we just stop it at its heels and wait to see what will happen,” Zdeněk Hamouz concludes.

Michaela Koubová

# The Range of Contributions from Prevention Funds Is Wide But Their Benefits on Health Are Doubtful Sometimes, Says Jojko, Head of the Association of Outpatient Specialists

Today, health insurance companies offer a whole range of contributions as part of their prevention funds: from those for physical activities to vaccinations to more thorough preventive check-ups. However, taking advantage of these financial bonuses also has shortcomings. Some contributions have doubtful benefits on health, others could offer higher amounts or could be provided more frequently. The main problem remains that today, many insured people do not heed the word “prevention” and they do not take advantage of the options, whether covered by standard means or supported by prevention funds. The aforementioned was stated by Zorjan Jojko, the Head of the Association of Outpatient Specialists, at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare, held on 22 July.



“Vaccinations have an unequivocal priority. This is prevention that should be supported and we do not understand why anyone would not let themselves be vaccinated against any disease if there is no evidence that it causes any harm, and on the contrary, there is more and more evidence that vaccinations help,” states the Head of the Association of Outpatient Specialists, Zorjan Jojko. Photo: Radek Čepelák

According to Zorjan Jojko, insured people today have much to choose from in terms of the prevention funds of health insurance companies. “The extent of each preventive check-up is rather wide even according to the field. The contributions are often generous, and it is a shame not to take advantage,” Jojko emphasised.

Today in the field of oncology, health insurance companies offer not only the three regularly covered national screening programmes that target colorectal cancer, breast cancer, and cervical cancer, but also birthmark screenings, mammogram screenings outside of the regulated compensation for the given risk group, complex oncological examinations in specialised offices, or the prevention of prostate, gut organs, or oral cavity cancer. Contributions supporting efforts to quit smoking can be categorised as both preventive measures in oncology and cardiology, and aside from this, when it comes to cardiology, health insurance companies, for example, contribute to purchasing digital tonometers.

“As a cardiologist, I am saddened by the lack of contributions in this field. On the other hand, I am glad that health insurance companies offer finances for the purchase of digital tonometers. I myself promote the saying of a tonometer for each family, and now I also say an EKG for each family,” Jojko said.

In the field of psychiatry, there are contributions for cognitive aids, for psycho-social interventions, or for brain activity screenings. Contributions for voluntary vaccinations, for example tick-borne encephalitis, hepatitis, pneumococcus, measles, the flu, HPV, meningitis, shingles, or diseases associated with travel, are often included too.

“Vaccinations have an unequivocal priority. This is prevention that should be supported, and we do not understand why anyone would not let themselves be vaccinated against any disease if there is no evidence that it causes any harm and on the contrary, there is more and more proof that vaccinations help,” stated Zorjan Jojko.

Aside from this, health insurance companies contribute to interdisciplinary screenings beyond standard preventive check-ups, e.g., lab tests of urine, blood lipid levels, blood sugar levels, renal functioning, or thyroid gland hormones. Furthermore, there are contributions for the screenings of prothrombotic mutations or of osteoporosis, examinations of the optic nerve, or a podoscope assessment.

An area that is gaining in importance, especially during the Covid-19 pandemic, is telemedicine. Thus, health insurance companies support the distance monitoring



Zorjan Jojko's lecture is listened to by (from right) the editor-in-chief of Zdravotnický deník, Tomáš Cikrt, President of the Czech Society of Atherosclerosis, Michal Vráblík, President of the Czech Society for Oncology, Head of the Department of Oncology, Second Medical Faculty of Charles University and Motol Faculty Hospital in Prague, Jana Prausová, Deputy Director, General Health Insurance Company, Ivan Duškov. Photo: Radek Čepelák

of heart failure, arrhythmia, diabetes, sleep apnoea, or the ITAREPS system, which can detect worsened states of people with schizophrenia.

### **A ten-thousand crown contribution for a watch with an EKG**

On the other hand, Jojko believes that health insurance companies sometimes contribute to things that have doubtful health benefits. An example is free admission to aqua parks, but only one day is set aside for this benefit, meaning that facilities are overcrowded, and one cannot consider this to be beneficial for health. Even some spa stays are questionable, as the curative procedures are often overshadowed by entertainment, and the benefits of some children's stays are also debatable.

"We wonder why some health insurance companies contribute finances to buy Nordic walking poles, but perhaps this could be meaningful. What I do not understand at all is why one health insurance company contributes a sum of ten thousand crowns for purchasing a watch that also measures EKG, when today you can easily purchase a small EKG for three thousand. For me, this is a senseless squandering of funds, and the pertinent health insurance company should give this a thought," Zorjan Jojko considered.

According to Jojko, aside from the fact that health insurance companies sometimes contribute to not entirely meaningful activities in terms of health, the very structure of each contribution could be improved – for example, some are too low, whereas some do not have a sufficient frequency. Other times the interpretation of some screening results is debatable, such as a resting EKG or occult bleeding tests during colon cancer screenings - the results can be satisfactory, yet the patient has a problem.

### **The approach to prevention is unbalanced**

Taking advantage of preventive activities can also be complicated by the fact that they are covered using several modes. We have standard covered prevention, such as national oncological screening programmes or regular preventive check-ups at one's general prac-

itioner. Then, there are additional insurance company programmes, such as VZP Plus, which focus on hypertension or diabetes. The aforementioned examples are covered from the prevention funds, when the patient first pays for the given screening, activity or aid, and then the health insurance company retrospectively pays the contribution based on the receipt presented by the client. However, every health insurance company contributes to something else and has its own methods, thus often, even physicians do not know how to advise their patients.

"The problem that we primarily face in the Czech Republic is the disinterest of patients. There is no pressure to alter this situation. We need to think about why this is so, whether we should introduce a system of rewards and punishment, so that the client is motivated to attend check-ups," underscored Jojko, who also believes that physicians having less and less time for prevention and explanations is a problem.

When putting through preventive measures, the fact that the returns are more long-term is a problem, as many stakeholders are put off. Also, the question remains who should support, cover, and analyse preventive measures. According to Jojko, not only the government and health insurance companies should participate, but employers as well.

"But this is problematic. In my experience, when we approached companies with the offer of prevention programmes, all the managers signed up. But they did not sign up their drivers. However, these drivers are at a significantly greater cardiovascular risk than the managers. Thus, it should be balanced," Jojko added. According to him, it would be ideal if every person around forty years of age falls slightly ill so that they are forced to visit their general practitioner. The GPs would then be able to carry out a preventive check-up, thus detecting any problems that could otherwise continue to quietly develop.

Michaela Koubová

# Primary Prevention Is Not Only a Healthcare Issue But Also a Society-Wide Matter. There Are Economic Benefits, Says National Institute of Health Director Macková

Although data has proven that preventive measures are cost effective, the money designated for health promotion and health literacy in the Czech Republic has been decreasing. Yet primary prevention, which helps us prevent the development of diseases and maintains a healthy population, should be paid attention to not only by the healthcare system, but also society as a whole; and it is the government that should enforce research and evidence-based information. Seeing that investments into these fields yield returns in the long-term, the benefits cannot be politically enjoyed. Perhaps the mirror that the Covid-19 pandemic held up to us could change this, says Barbora Macková, Director of the National Institute of Health, at the international panel of the Permanent Conference on Czech Healthcare.

“It has been proven that 80 per cent of diseases are preventable. Thus, if almost 500 billion crowns are spent on healthcare, then almost 400 billion are preventable. If one speaks of the effectiveness of preventive measures, then approximately 10 per cent of this, i.e., 40 billion, could be influenced through primary prevention. In addition, diseases bring about costs, not only for diagnostics and treatments, but also losses that primarily originate because a sick person cannot go to work, they have no income, and they have sick leave benefits. Therefore, the government has to invest not only into one’s healthcare, but also into their social care,” Barbora Macková stated.

If we pay attention to preventive measures for each disease, the cost effectiveness is 6:1, and up to 13:1 with obesity. Sadly, though, finances for health promotion and health literacy have dramatically decreased in recent years. Just in the last two years alone, they have fallen by 36 per cent.

“We wait a long time for returns on the investments into prevention. The economic benefit is not seen

from day to day, and from a political perspective, there is too long an interval for any sort of utilisation. Therefore, prevention is a very undermined component of healthcare policies,” Macková explained.

## We need to monitor the health of the population

Just as a reminder, primary prevention targets the causes of diseases and tries to prevent them. Their objective is to ensure a healthy population and the extension of one’s lifespan in health. A typical example of primary prevention is vaccination, and, of course, a healthy lifestyle. On the contrary, secondary prevention aims to detect diseases early and treat them so that they develop no further. Thus, the target group are people who have yet to discover that they are ill. Tertiary prevention aims to prevent a disease from returning. Thus, it focuses on patients who know their diagnosis and have successfully treated it in the past. A typical example are oncological diseases.



Health is not formed by hospitals, emphasises Director of the National Institute of Health, Barbora Macková. Photo: Radek Čepelák



It has been proven that 80 per cent of diseases are preventable, says Barbora Macková, Director of the National Institute of Health. Photo: Radek Čepelák

Therefore, whereas secondary and tertiary prevention is primarily a matter for the healthcare department, primary prevention has to be implemented in a wider context.

“It is not just about the medical perspective or the options of general practitioners and other doctors. The government and its institutions also pay a significant role in primary prevention, both in terms of research and in presenting evidence-based information that proves why it is important to prevent illness and why we need to monitor the population’s state of health,” Barbora Macková described.

## Health is not formed by hospitals

Health promotion is fundamental, especially in terms of informing citizens. As we, ourselves, play the largest role in our own healthcare, it is important that the populace has information on how and why to care for their own health.

“Health is not formed in hospitals; it does not work that way that when I am ill, I go to my doctor who unscrews me and then puts me back together, and everything is alright again. Whether we are healthy

or not originates in the family and in the environment that we find ourselves in the most, from schools to workplaces. It is important to coordinate the skills that everyone has with public support. This should create suitable socio-economic conditions, including the environment,” Macková emphasised.

An important part of primary prevention is also public health protection. As a part of these efforts, it should be possible to interpret the monitoring of population’s health as well as harmful factors and phenomena in the environment, for example, workplace or outdoors.

“Perhaps the mirror that Covid-19 held up to us was the catalyst for changes not only in the way each of us perceives our own health, but also on the side of the politicians, so that now more attention will be paid to prevention. Primary prevention is not the matter of just one department, but of the society as a whole. We are dealing with not only health aspects, but with social aspects as well. For the planning and the political perspective, it is important to also emphasise economic benefits that these preventive activities bring about,” Macková concluded.

Michaela Koubová

# Prevention Funds Should Not Be a Company Tool to Lure Clients. Health Prevention Programmes Should Be Based on Evidence, Says Deputy Director Duškov

Although prevention is the focal point of population's health, prevention funds of health insurance companies represent only a fraction of the finances meant for treatment. To make things worse, the contributions of some health insurance companies lack the character of preventive measures - instead of supporting the health of their clients, they instead have the objective of gaining new ones. According to Deputy Director for Client Services of the General Health Insurance Company Ivan Duškov, the opposite approach should be implemented: finances for prevention should be greater and preventive programmes should be selected so that they truly are based on evidence and have proven benefits. Duškov stated the aforementioned at the international panel of the Zdravotnický deník Permanent Conference on Czech Healthcare, held on 22 July in Prague.



In the Czech context, motivation and education, in terms of time and finances, are more difficult but better than penalties, says Ivan Duškov.  
Photo: Radek Čepelák



The presentation of the Vice-Chair of the Health Committee of the Slovak National Council, Anna Záborská. Photo: Radek Čepelák

In the future, Ivan Duškov would like to base the General Health Insurance Company's (VZP) prevention funds on the fact that, although medical treatment contributes to the overall improvement of the population by 30 per cent, 70 per cent is based on preventive measures.

"However, if you look at how prevention funds are set up, the opposite is true, or, there are even less funds available, respectively. The Public Health Insurance Act allows us to create a prevention fund from 0.3 per cent of the general fund. The question is whether this can be changed in future, allowing us to support evidence-based preventive measures to a greater degree," Ivan Duškov pointed out. Though about CZK 200 billion from the VZP general fund go to treatment now, in 2019 (the last year not affected by the Covid-19 pandemic), contributions of only approximately half a billion were spent from prevention funds.

At the same time, it is a known fact that for every dollar invested into prevention, four dollars for treatment are saved. Sadly, this fact is not yet reflected in the

public health insurance system to a great degree. In addition, not even the settings of prevention funds themselves are always optimal, and some health insurance companies do not use them for prevention or for the acquisition of new clients.

"A ten-thousand crown contribution for a watch with an EKG entices more than birthmark examinations. However, a professional perspective should prevail in the future. At the General Health Insurance Company, I would like to introduce the perspective of experts and the truly proven evidence-based character of each intervention to the outlines of each prevention fund programme. We have a lot of work ahead of us," Duškov stated.

### **Vaccinations and health promotion of mothers and children are meaningful**

What support is meaningful within prevention programmes? According to the McKenzie study, the most effective prevention programmes are vaccinations. "We see the nonsense discussions being held now.



From the right, the editor-in-chief of Zdravotnický deník and host of the discussion, Tomáš Cikrt, President of the Czech Society of Atherosclerosis, Michal Vráblík, President of the Czech Society for Oncology, Head of the Department of Oncology, Second Medical Faculty of Charles University and Motol Faculty Hospital in Prague, Jana Prausová, Deputy Director, General Health Insurance Company, Ivan Duškov, Head of Association of Outpatient Specialists, Zorjan Jojko, Director of National Institute of Health, Barbora Macková, founding member of the Association of General Practitioners Czech Republic, Zdeněk Hamouz, and Director of National Institute of Mental Health, Petr Winkler. Photo: Radek Čepelák

As the GHIC, we are exposed to pressure because we dare to send personalised letters to our clients asking them to consider getting the Covid-19 vaccination, which is effective and safe. Now we are facing harsh criticism because the letter cost CZK 15 per client. However, a day of hospitalisation in the Intensive Care Unit costs CZK 60,000,” Ivan Duškov observed.

Aside from vaccinations, health promotion of mothers, long-term nursing, and developing healthy habits in children is important. Habits that remain for the rest of one’s life develop throughout childhood and adolescence: if a child becomes used to brushing their teeth from when they are little, it becomes a matter of course for the rest of their lives.

“And if one develops a set of habits through education or motivation, they will, for example, attend their regular preventive check-ups. On the contrary, changing a forty-year-old man’s attitudes and behaviours when they live a certain lifestyle is a rather difficult task. Of course, where there is a will, there is a way,” Ivan Duškov pointed out.

Duškov believes the principle of harm reduction to also be central in terms of both tobacco and alcohol.

## We are not ready for penalties

Since efforts to implement preventive measures have not been very successful in the Czech Republic, some debate whether penalties for undesirable behaviour should be introduced in addition to a reward system.

“But be careful here. In the Czech Republic, the thirty-crown regulatory fee won the election twice for a certain political party. If we were to have said then that we would enforce greater taxes on obese people or on people engaging in what we consider to be toxic behaviour, then I would not last in my position as Deputy Director for long. I therefore think that although the gentler path of motivation and education is more difficult in terms of time and finances, it is the correct path in our context,” Ivan Duškov concluded.

Michaela Koubová