

## ANTOINE FLAHAULT

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I will ask Antoine Flahault to go first and talk to us about these issues from the perspective of prevention and how much the world has focused on responding therapeutically to diseases rather than looking at prevention.

### **Antoine Flahault**

Thank you, Michel, and I also want to thank the organizers, particularly Thierry de Montbrial, for inviting me to give this overview on prevention.

Maybe our greatest success in prevention is the eradication of smallpox. Smallpox killed 300 million people just in the 20<sup>th</sup> century and if it has been eradicated today, we probably owe it to the Soviet Union. In 1958, a delegation from the Soviet Union came to the World Health Assembly, the governance body of the WHO, to propose the eradication of smallpox. Everyone expressed skepticism since we were in the midst of the Cold War with high tensions between the Eastern and Western blocks. In fact, it was a great success and after 20 years it was totally eradicated from the planet, thanks to the multilateral involvement and commitment of all the states, including the United States, the European countries, and all the Eastern block at that time. On many other domains, vaccines proved very successful in acting like an effective filter on the diseases they target. Just a few years after their full deployment, they almost totally suppress the diseases. This shows how effective prevention acts.

We can measure the effect of prevention in the dramatic decline of child mortality observed everywhere in the world. In a few decades only, there has been a continuous decline in mortality under 5 years, in any country, on all continents. This is partly due to vaccines but not only. Increase in the incomes of people in all countries, even in Sub-Saharan Africa, but also to the combined multilateral efforts to fight against child mortality, and improvement in literacy and education all played a definitive role. However, it remains an important room for progress in the future. For a century we have learned how to fight cholera. We do not fear any risk of cholera outbreaks in Paris, London, Berlin, Abu Dhabi or Geneva, but that is not the case everywhere in the world. Cholera would not spread in the developed world, when actually, cholera bacillus is often released from the guts of travelers coming from contaminated countries. Cholera has been fully controlled through sanitation measures, separating, filtrating and purifying tap water from wastewater, much before any vaccine was made available. Indeed, very few people in this room have been vaccinated against cholera and nobody fears to catch it in its daily life in rich countries. For a century we have known how to eliminate cholera but unfortunately there was

no resolution brought from the Soviet Union, nor from Switzerland, Germany, the USA or anywhere, proposing to the World Health Assembly to eradicate cholera from the planet. Why? Same question for malaria. When some Caribbean and Indian Ocean islands under French, Dutch or US governance have succeeded to eliminate malaria, without the help of any vaccine, malaria continues to kill children, a few miles from these developed territories. We have not finished the job. We have not eradicated malaria. Nowadays we have even effective vaccines against malaria and cholera, and we have all the know how to eliminate these killers from the planet, so we could eradicate them. In many domains, prevention has a lot of room for progress but political will is lacking. When it comes to air pollution, we could think that it is equally distributed on the planet because we all share the same atmosphere without borders, but this is not true. We are still selling fossil fuels that are not well-purified and that really intoxicate populations in Sub-Saharan Africa and in Asia when we improved the situation in the Western world. Burning these fossil fuels generates fine particles that is killing and reducing life expectancy and also provoking cognitive disorders when ageing, i.e. Alzheimer's disease and dementia. Prevention is not a matter of doctors only but needs political commitment and involves many other sectors of society, including water sanitation, mosquito control, food and agriculture, transportation and energy.

We know that lifestyle changes are key factors in prevention playing a role against many conditions, such as non-communicable diseases, diabetes and obesity, cancer, and mental disorders. According to the WHO, a healthier diet could save up to 10 million premature deaths a year. It would also be associated to what we call "co-benefits", since 37% of greenhouse gas emissions are produced by the food and agricultural sector and of those 80% are produced by livestock alone. By reducing our consumption of red meat, we protect our health against cancer, cardiovascular and other chronic diseases and we also contribute to that of the planet and the climate. Similarly, active mobility, such as taking public transport, biking or just walking 20 minutes a day, can double the number of our healthy life years with huge cobenefits for the planet, air quality and the climate.

However, prevention is not an easy job since we are often reluctant to change our lifestyles and behaviors. Refraining from drinking alcohol, smoking tobacco, eating junk food, being sedentary in watching screens are not easy to obtain. Pills or surgery are sometimes easier to prescribe to fight obesity, diabetes, hypertension, or high cholesterol. We should probably be pragmatic, considering drugs and surgeries, when proved effective and accessible, as tools and partners in to help prevention. Therefore, we should not be too dogmatic and look at how these new therapies which are coming can also contribute, when made accessible, in fighting obesity, diabetes, cardiovascular diseases, cancer and dementia.

My conclusion is that we are facing today huge demographic challenges, with a rapidly ageing society that needs multilateral efforts, exactly as we had in the last century for smallpox, with a lot of diseases and risks we could try to avoid or reduce. It is not about prolonging our lives infinitely but much more about improving our health and quality of life within our already long-life expectancy. Prevention is about compressing morbidity to the final steps of our lives. If we succeed in requiring less cure against chronic diseases in seniors we will contribute to save health expenditures. In OECD countries, we dedicate 95% to 97% of our health expenditures to treating patients with expensive drugs or hospital stays. Prevention can avoid or delay diseases from occurring. With less healthcare needs, prevention can contribute to reducing the



shortage of healthcare workers. And prevention also benefits the planet, the air we breathe and the climate. There is a lot to learn and to win with prevention. What is often lacking is political will here.

Thank you for your attention.