DEBATE

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

We will give the floor to the rest of the group. I would be interested to know what Petra thinks, as she has been in the industry for a long time. Would you have had a very similar approach 10 years ago or are things changing and, if so, in which direction are they going?

Petra LAUX, Head of Public Affairs at Novartis

I think that the need to act is probably getting more and more urgent and that is obviously due to more and more globalisation. If you look at the prevalence of disease, there was a United Nations summit on non-communicable diseases in September and if you look at what was agreed there, it was quite meagre and there were no commitments that really came from Governments on how to move forward. At the same time, the burden of disease is increasing because of the emerging middle classes and the difference in lifestyles. That is therefore certainly increasing. The financial crisis is then increasing the need for the increase of productivity in healthcare systems, and I want to make clear that this is as much about getting better prices for medicine as such. It is about using the money and the healthcare system in a way that is sustainable. There are people who say that if we do not manage this better then we will have costs for healthcare that will be more than 20% of gross domestic product (GDP), which does not seem to be an option.

Jean de KERVASDOUE, Professor, *Conservatoire National des Arts et Métiers(CNAM)*

I have been in charge of the French healthcare system for five years and head of French hospitals and have been in the industry for 40 years. I have evaluated the Greek and Irish healthcare systems and am advising the Chinese and American Governments on healthcare systems. I would just like to say a few words.

I think that we will progress only if we make a distinction between health and medical care. Medical care is not health and health is not medical care, although one contributes to the other. I think that it is a mistake to speak of the health industry – you can speak of a medical industry.

When you look at data to validate what I am saying, as you know, medical care started to improve health only in 1945 when antibiotics were discovered and life expectancy started to increase in the 19th Century. Life expectancy was 35 years in 1800, 42 years in 1850, 50 years in 1900, 60 years in 1945 and now, in France, 82 years. When you look at China, life expectancy in China is 73 years and the Chinese gained 38 years of life expectancy in 50 years, with almost no medical system for most of the population. As you know, there are three systems in China. There is a system in the country which they call 'traditional' and a modernising system in the cities. However, they have what they call 'internal migrants' in China and there are 300 million internal migrants, who are in fact slaves because they have no liberties, rights or anything. They certainly have no healthcare.

When you look at the data from the Organisation for Economic Cooperation and Development (OECD), as you know, before the war Americans lived six years longer than Europeans and they now live five years less than the Japanese and three years less than Europeans. There is no relationship at all between health expenditure, which is mostly

medical expenditure, and health because the Americans spend 17% of gross national product (GNP) on medical care, while France spends 12%, Germany spends 11.4% and the average for the OECD is about 9%. The country where life expectancy is highest is Japan, which spends 8.2%.

That does not mean the health and pharmaceutical industries are not great industries – and I will come back to that – but the first thing to remember and say to this conference is that the most important thing for health is peace. When you look at African countries, for instance, you can see that for one country during the first year of war life expectancy decreased by 10 years and the countries with the lowest life expectancy in the world are countries that are at war.

When you try to advise Governments in this area, it is really very basic things that are not very related to healthcare that should be introduced – how you have data, who the people are, where they live and how much they earn, how you get organised and who is practising medicine and where, and so on.

The first thing therefore is that health is related to peace and the capacity to develop agriculture, food and vaccination. I am on the Board of the Doctors Without Borders foundation – Médecins Sans Frontières – and you can see that we help children in countries such as Niger to survive but we do not know what will happen to them after that.

The first thing to remember therefore is that the best way to improve the population most of the time is by being sure that the country is at peace and that there is some economic growth and basic human rights.

My second comment is on the medical industry. As I said, the medical industry is a great industry, but it is also a corrupting industry in many countries. I sometimes do not think that it is by chance that in a country such as Morocco the Moroccans believe that generics are bad drugs. The pharmaceutical industry has certainly played a role in that belief – although not you, of course, or the great companies that are represented here. However, it is a fact. You try to explain that generics are good and so on.

One of the things that we could therefore advocate here is a world control of generics. As you know, there is a lot of traffic and most of that traffic comes from India through different channels – but you know than better than I. One way we could certainly help would be through access to basic drugs – and there are a lot of genericable basic drugs that are accessible on the market. In addition, there could be a change in the law. After the Pretoria trial, where 31 pharmaceutical companies sued the South African Government for copying Acquired Immune Deficiency Syndrome (AIDS) drugs – although that is an old story – certain countries can now produce certain drugs under certain circumstances, but this does not include the poorest countries. I think that that should be reformed so that when people have the money they have access to drugs that are not trafficked. I think that that is very important.

Thirdly, there is Petra's question, which is a fair one, about how you finance innovation. Just to say a brief word on your comment, but false that aging plays a very limited part in the increase in health expenditure. In France, that is 0.5% a year. It is therefore very low for reasons I could explain if you wanted me to. As Petra also said, innovation in the health industry can induce productivity significantly. You can see that, as a way of delivering medical care, productivity can be increased rapidly by very classical health innovation cost only when people are allowed to do things that were not feasible before. However, most of the time, innovation in fact cuts cost.

There is fair access to the debate between Europe and some Americans because, as you know, health expenditure in America is 40% of world expenditure. The figures are more or less 40% in the US, 30-32% in Europe, 8% in Japan, and that leaves 20% for the rest of the world. Drugs are free in America, which is not the case in Europe, and the Americans pretend that they are paying for medical research for the rest of the world, which is partly true and partly false.

However, there is a real question of having access – and I will end here. When you have real innovation, as we can see with AIDS, the world's population believes that it is a public good – by that I mean that it is free. When you have real innovation, which is the case for antiretroviral therapy in AIDS then you have a debate and a problem of financing the industry and its research, provided that the industry has a number of problems, as you know. Its classical business model with blockbusters is changing. It is an industry that came from chemistry and it missed the biological turn so that

it is buying back knowledge that had gone out of the industry. This is for good reasons and I think that you are wise to do it.

Just to finish on the future, what is going to change most is genetics. In eight years from now, the cost of my genome will be the price of a pair of blue jeans at about USD100. You can get some information now for USD 400 and a reasonably good genome for USD 3,000. That will change how medical care is going to be practised, but that is probably another thing.

I am sorry for being so long, but just to come back, health is not medical care. Medical care brings a lot of good in completing health improvement. The success in the past has been tremendous and we are still gaining three months of life expectancy. Steve was looking for indicators and I think that there is a very simple one, which is life expectancy at any age, with or without handicap. That is probably the best indicator that you can have.

On any grounds, this has improved and the pharmaceutical industry has of course helped us to cure some diseases. Medicine has changed because of the pharmaceutical industry and even surgery has changed for that reason, but the regulation of the pharmaceutical industry and the financing of medical innovation raises worldwide problems.

I will just say a word on infectious diseases. You forgot to remind us about flu in France. On a regular basis, we vaccinate twice as much as we vaccinated during this crazy episode where the Minister believed that she was able to invent a new vaccination system. However, that is another story.

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

Are there any other remarks?

Jean-Michel SEVERINO, CEO, Investisseur & Partenaire

I used to work in development policy and, as a professional in this sector and having amongst other things run relatively large health programmes, I have become increasingly frustrated by the way world governance related to health has evolved. I would be very interested to hear your reactions, especially from business, on this, and I will try not to be too long.

What we have seen over the past decades has been a kind of fragmentation of global governance related to health, with a growing number of stakeholders – private and public - and governance definitely losing leadership in this structural policy with, as a consequence, growing management costs applied to this policy and a lack of vision for several reasons, part of them being that some of the key stakeholders in health and nutrition are basically outside the policy even though they are big contributors to the outcomes, as was outlined. Secondly, it is because large sectoral or thematic policies related to special diseases have emerged, sometimes with relationships with domestic policies in countries, leading to very strong biases and local inefficiencies. It has become more and more difficult to see how you can get back to - if there ever was consistency in the past – more coherence, a structured vision and shared goals. The ultimate goal is reducing mortality and morbidity, but in terms of specific diseases, areas and structural policies and what kind of combination of quality and quantity it could be, it is very unclear whether we are looking at reducing costs, increasing excess or curing specific diseases that are highlighted by public opinion emotionally as the core goals of the policy. All this has become more and more fuzzy.

I would like to ask the panel how they see this. How comfortable or uncomfortable are you, especially as business players, in this context? What kind of consequence do you take out of this landscape – if you agree on it, of course, and you may not share this view – and how, especially in this context, do you manage your relationship with this global governance and how do you fit into it? What is the kind of construction that you would like to see, if only to defend your

own interests? You have legitimate interests as a business that may be different from those of other stakeholders – that is how life is structured – so what, for instance, do you see as the best structured mechanisms that would allow some debate that you would be ultimately comfortable with?

Participant

If I try to comment on what was said, firstly, I would personally agree on the point that you made, which is key, that we should differentiate the medical industry from health as such. It is obvious that when you look at the basics of demography and what you mentioned about life expectancy there are clearly basic elements that are not directly or indirectly linked to a large part of the activity of the healthcare industry. In that respect, I think that that is quite a good point.

Secondly, we must recognise that at least we as the healthcare industrialists are one player in this industry, but we are only one player. At the end of the day, the way that healthcare systems are organised – and you advise Governments on how to organise that – is as important as what we can bring. I think that we can bring two things. Firstly, as we like to say, it is productivity and the availability of drugs when it comes to the pharma industry and, secondly, innovation. I mentioned the fact that I joined this industry quite recently and before I joined it was far from obvious that the best existing mechanism for developing and creating innovation in a new treatment came from the private sector. At the end of the day, you could ask why that is so. Health is a public good and it should be handled by public players. Reality and experience has shown that it is not the way it has worked either. Interestingly, innovation –

Participant

I was giving a lecture in Hanoi about eight or 10 years ago and I had as translator and I said that the communist countries never discovered drugs. The translator asked whether he should translate that and I said that he should.

Participant

You are therefore going in that direction. If there is one thing that this industry brings, and you could of course argue that this innovation can come partly from the university area, it is a way of transforming pure academic research into actual treatments and the only system that has worked so far is having the contribution from the private sector and, basically, a profitable sector. For me, that is extremely important.

The second point that is important, in my view – and you mentioned the point on small molecules, as you like to say in this industry, and biological drugs and the fact that some of us missed this new generation and so on – here again the outcome is that the way to progress is through competition. There are those that are good and those that are not good. There are some biotech industries that have developed dramatically successfully in the US in particular in the past 20 years, as well as some in Europe. It is like any other industry. Competition, provided that it is organised, appears still to be the best way to promote innovation and for new treatments to be made available.

The third point that I would like to make is that you are right to say that progress in genomics will make the cost of identifying the genome of an individual much cheaper but, on the other hand, the direction that we are taking is a direction towards personalised medicine. That is a very good direction but one of its consequences is that a drug will not treat tens of millions of people but tens of thousands of people because each drug will be devoted to a specific type of person, linked to their genetic characteristics or whatever it might be. I think that that is one of the difficulties in this industry. On the one hand, you create productivity, and this productivity helps you to develop productivity in innovation, which definitely helps you to develop new drugs, but these new drugs often meet a need that is very limited

in terms of numbers of people and you can always argue that part of these people have probably not been identified because of the 7 billion people living in the world and we are back to the question of having –

Participant

Could we put it slightly differently? The basic idea is all right, but what the genome will bring is that we will know, and we are starting to know, who will be sensitive to a drug and who will not be. The consequence of what you are saying is that a number of drugs will be sold. As you know, drugs work for some people and do not work for others today and up to now we have not known why. We are starting to know why and the market will decrease for that reason. We will all probably have our genome on our portable phones.

Participant

On Jean-Michel's point, what I was trying to say was that this sector, as with others, is more complex than many people would like it to be. There is governance on the one hand and international bodies and multiple players addressing multiple types of diseases in different areas differently all over the world. For me, while we could look for some global principles on how to handle global health, we must recognise that on the other hand a lot of this remains local, and local by many means. It can be at the level of states or regions or linked to the way the health system is organised and, for me, there is a lot of inefficiency.

From the floor

[Inaudible] industry controlling the generic industry. [Inaudible] world agency able to control the generic industry.

Participant

What do you think?

Petra LAUX, Head of Global Public Affairs at Novartis

We are the second-biggest generic producer.

From the floor

I know.

Petra LAUX, Head of Global Public Affairs at Novartis

How would you take control? Do you mean in terms of the quality or market authorisation?

From the floor

No. You are quality control. The problem is on the other hand. When you are in Niger or a very poor country you get generics that are not generic, in fact. The problem is not therefore you; it is being sure that the poorest people in the world get generics from Novartis and not from elsewhere. I think that that is very important in order to make access to generic drugs available to people. People are afraid of having access to generics because the quality of the generics is not controlled.

Petra LAUX, Head of Global Public Affairs at Novartis

On this particular part, we have been trying to raise the issue of sub-standard generics and one way forward would have been capacity building with the local national regulatory authorities to make sure that countries themselves have better tools. On your distribution point, I am always stuck. When I look at our experience in Malaria, we deliver 70 million treatments per year of high-quality anti-malaria medicine, which is free for the patient. It works reasonably well, but not optimally. If you look at it, there is still stock outs and we are now trying to have an short message system (SMS) system to make sure that they do not have stock outs. However, there is very little responsibility and the whole distribution chain is [inaudible].

I am sure that you are acquainted with the Affordable Medicines Facility (AMFM) – the access to malaria medicine programme - where subsidised malaria medicine is being distributed and the distribution chain has a financial incentive. The idea of this is to make sure that where the public sector does not reach, the economic incentive for people to earn some money we will help to get it into areas which are not optimally served. The question then is again corruption and how to control this so that the subsidy is not being eaten up and patients still pay too much. However, there is obviously a value in having a financial incentive in there and I do not believe that we can control distribution chains from a central agency.

I was very interested in your view. We would probably agree that if you have basic access to central medicines that with the huge progress that is being made there are many diseases that you can treat with this. When we were looking at this with regards to the Non-Communicable Diseases Summit (NCD Summit) we were wondering what our position should be because we felt very bad, as a responsible company, about saying that we have innovation for the developed world and those who can pay and only the generics for the other world and we wondered how we could position ourselves because we believe that at least some innovation needs to be in the poorer countries as well. However, how could we do that in terms of business models?

Currently, in the very poor countries it is essentially only the elite who have access to these products. I would be interested in your views on this. My internal discussions have been about saying that it is always a question of the diffusion of innovation and there may be different degrees of diffusion and that should go hand in hand with the development of the local infrastructure because it is only if you have a cancer centre that you can use some of the high-tech medicine. We would probably be prepared to offer more and more innovation at a preferential price, but only if there is a local infrastructure and it is being used properly. However, I do not know how that resonates.

From the floor

You raise the problem and I will not raise it differently. In fact, let us put it differently. There are very few basic innovations that are life and death innovations, and AIDS antiretroviral therapy is an example – a counter-example. What has happened is that many excellent and very efficient drugs have now become generica. The example I tell to my students is… In France, we increase life expectancy by three months each year, which is 16 million years. We do 800 heart transplants and these heart transplants improve the lives of these 800 people for a maximum of 10 years, so

that is 8,000 years. Therefore if you do not heart transplants, you do not see anything. I am happy to be in a country where we finance heart transplants, but it has absolutely no impact on the lives of most people.

In your question, you raised something more basic in terms of how you train a nurse or nurse/practitioner, physician or other people in order for a drug to be distributed and there are the basic rules of hygiene and so on. The problem is that in certain countries, such as Morocco, part of the population has access to the same medical care as we do – 15%; 25-30% have access to something; and 50% have access to nothing.

Related to the question about the efficiency of the health industry is the political system and also the education system. We need nurses and doctors for that and we have to find ways of paying them properly and so on.

Participant

I think that you are definitely right. The education part is quite an important part of the efficiency of a health system, and this goes beyond the industry [inaudible]. You could argue here that there should be more regulation on generics and quality.

From the floor

There should be more regulation on use. We used to have some international agencies previously and while we are talking about malaria, we could also talk about DDT, and it is probably more efficient to use DDT. You are probably too young to know about it, although you will have heard about it, of course. Everybody knows about the DDT controversy. DDT was very efficient, except that there was a lawsuit from people living in Long Island who claimed that it was making the eggs of wild falcons there soft. All the rights of environment in America came from this lawsuit and DDT was then prohibited from being made in America. 500 million people therefore now have malaria and 3 million have died from it. Probably the most efficient way of fighting malaria is to fight insects and not curing people. There is also the debate about nets [inaudible].

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

[Inaudible] some indirect links with [inaudible].

Steve HOWARD, Founding Secretary General of The Global Foundation

It is fascinating, to say the least, to think about how we often tackle the wrong end of the problem in the attempt to solve it and it is very difficult to undo things. I would be keen to hear from other members of the group, but the question that occupies my mind is how this plays back into a global governance discussion. What needs to change from today and what could be generated from us here that would lead to some momentum in this area that would be different from what we have had? Jean-Michel has talked about the great frustration over the fragmentation of global governance and this gentleman is giving us all this detailed information about how we have had things upside down. Petra was talking about the notion of a global health citizenship framework, which does not exist but could exist. I wonder how we can play back these multiple issues, which are extremely complex and which we are not equipped to address in detail today.

However, for me, when the leadership of the G20 meets once a year, I do not particularly want it to spend its time talking about the fine details of how to run a financial system worldwide. I think that we have many experts on that. What I would love to see is the G20, for example, as a leadership group saying what its shared goals are for health and food in a substantial way that leads to work being done. I am therefore interested in seeing what the linkage is back to this conference's global governance question on these issues because it appears that there is a vacuum. It appears that there is no vehicle or means by which we can bring together international opinion or the international community to shape a view on global governance on health.

Participant

To go back to the question of food, you drew a parallel that from a governance point of view that makes some sense.

Steve HOWARD, Founding Secretary General of The Global Foundation

You are right.

Participant

I would therefore be interested to hear some of your thoughts on that.

Steve HOWARD, Founding Secretary General of The Global Foundation

Food security is actually a mess. It is not clear or universalised and it is not governed globally in an effective way. There are expert bodies such as the Food and Agricultural Organisation (FAO) under the United Nations which does great work, like many of these expert bodies, but the leaders do not even agree on what food security is. For an Australian, for example, food security now and in the future is not about what you can grow within your own borders to sustain your population, but about trading because food will increasingly have to be grown in the future in some areas and move to other areas where it is consumed. There is therefore even a definitional problem with food security.

It is therefore not as if we have solved these things at global level, although we may have solved other things. In fact, we are just at the beginning of asking what the issue is at the global level that needs to be defined and where it is possible to shift and find agreement. I know that during France's leadership of the G20 President Sarkozy had food security on the agenda and it tackled some of the issues such as the volatility of food pricing, which is important. However, I think that it is important that if you are talking about global governance to talk about the high-level issues and the point that was made earlier about life expectancy is something that you can measure quite readily and agree to do something about at quite a high level. You do not have to agree at a global governance level about every subset of what you would do.

I think that there is therefore something missing in our G20 leadership and global governance structures and it can come from not just Governments waking up one day and saying that it should be done differently but also from people like us who are non-state actors and from the private sector because the private sector is committed to succeeding competitively as it is part of what they do. It can also come from civil society, and citizenry can play a more effective role in saying to Governments, the G20 and global governance bodies 'This is what should be on your agenda and this is what we want you to consider. We will help you put it there and make that decision' and that will then cascade down into institutions and changes and so on.

This does not work with food yet and water is not even considered as a standalone issue although it is one of the great underpinning issues. In my view, it is one that will fuel wars before any of the other security issues such as energy. These issues are out there and the point would be in the case of health that health is not agenda, but it is not alone in that we are having trouble in saying what is that we want to consider in the global governance context. If the World Health Organisation (WHO) and the current methods are not getting us there, what is that we need to invent to have the right discussion?

From the floor

It is the same issue for food, environment and health because it is not a question of technology. The technology is there and generics are very good and very cheap products. Vaccines are also very cheap. The problem is social organisation. The first question, therefore, is peace and then it is economic growth and the faculty of people living in a country at a given point in time to have enough food to survive and the possibility to educate their children. We have done some work on this and the best indicator of life expectancy at birth, even in France, is the level of education of the mother. This was shown in under-developed countries, but it is also true in France. When you have an educated mother your life expectancy is good.

Steve HOWARD, Founding Secretary General of The Global Foundation

However, the central point is that at the high level these things are not individual compartments. It is about the whole package.

From the floor

You need to have a social organisation. I work a lot now with the Academy of Technology and am a member of *télémedicines* and that kind of thing. The problem is not technology. The problem is how you have a social organisation that enables you to use the technology. It is not the technology. We probably have the most complex technology in our pockets and it is the mobile phone. That is not the question; the question is social organisation.

Participant

I think that you are quite correct. We could argue on the one hand that there is more technology coming, but we have already talked about innovation so let us put that to one side for a minute. I would agree that the organisation of society is probably the key element for diffusing basic health variabilities and increasing life expectancy all over the world to a significant extent. Your example of the mobile phone is a good one because when you go to India you realise that there are more teenagers who have a mobile phone than teenagers who have been vaccinated, and it is not a question of cost because the cost of the vaccine is certainly not higher than the cost of the mobile phone. However, the way that the mobile phone has been diffused has gone much further and this takes us back to the question of public policy. Is the Government organising itself in a way that it wants to vaccinate the 25 million babies that are born each year in India or do they not care about that? The point on corruption is also there in that respect. I think that this is clearly a good example and this parallel is a good example. This is also valid in Africa to a certain extent as mobile phone technology is also well diffused there too.

Petra LAUX, Head of Global Public Affairs at Novartis

I have just been thinking whether this idea of a global health citizenship code or parameters could help us address some of this. The gentleman called Michel… deal with this fascination and you said that it had little to do with healthcare. However, when we think of health we spend most money on healthcare while other things would be more effective. I think that it might be a tool to establish the 'health in all policies' concept that we also had, I think during the Finnish Presidency, where we said that if you have something that you want to measure then it is a tool that will align everybody towards this and even the Education Minister can contribute to it within the parameters. What I think is that we need to go beyond life expectancy because the parameter in itself is too insensitive to short-term measures and only reacts to –

From the floor

[Inaudible] it is very insensitive. It is extremely sensitive.

Petra LAUX, Head of Global Public Affairs at Novartis

Okay. You know more about it than I do. However, I wonder if we could still have something more.

From the floor

[Inaudible].

Petra LAUX

[Inaudible].

From the floor

[Inaudible] by 11 years [inaudible].

Petra LAUX, Head of Global Public Affairs at Novartis

Yes. The question remains about the need for having a few more parameters and one of them could be vaccination and there could be a few others. I also still think that there could be good productivity in the health system because it measures progress. The results coming out of the health system have very little to do with the amount of money that you actually invest, and this is the variation. That therefore could be an idea. I am stuck as to why the WHO does not have a better grip on this, but that is Stephen's question. I know that they are undergoing reform and we might want to look at them getting their own house in order and see what the outcome of that is and what nation states are willing to agree on. When we listen to the adviser, the main obstacle to reform that he sees is that there is very little interest on

the part of nations to give away their powers and everything needs to be discussed back and forth. This is therefore going to be quite a long-lasting process again.

From the floor

I consult for non-Governmental Organisations (NGOs) and in one way or another involved in health. What I am going to say is therefore probably going to seem a little surprising. When we look at the framework of the problem in terms of governance – the decision-making process, who is making what decisions and what are the decisions that in fact need to be made and, secondly, how does accountability work, and thirdly, what is the financial reality behind all of it, so an integrated proposal or even an international code? – there are a lot of different axes of moving targets. One of them is to identify all the different players and another is what the side issues are. For example, you now have mobile phone verification of generic drugs in Africa by codes on pills and there are things such as education that have nothing to do with actual health itself but are important and related to the outcome. There are therefore a lot of moving targets.

I am a non-medical expert but I just want to say that I really appreciated Steve's comment about the G20. In my very NGO-focused world, the one common theme is that none of this can happen without Governments. If you look at the Gates Foundation website, underneath the listing of USD33 billion in assets it very clearly says 'But nothing can be solved without Government funding', and the Global Alliance for Vaccines and Immunisation (GAVI) is also Government funding, by the way, as you all know. Similarly, Doctors Without Borders – and I have the privilege of co-chairing the US National Advisory Board – just sent out in the US a very powerful email to US stakeholders saying that they all needed to call their congressman because President Obama's budget and the President's Emergency Plan for AIDS Relief (PEPFAR) money makes an enormous difference and millions of lives will be at stake. Even though Doctors Without Borders does not take any Government money and works completely independently, they are pushing on this. There are also a number of other areas where we have seen progress with Government.

I think that starting with the G20 and finding out how it can be put on the agenda is the really interesting question because we cannot solve everything with all the different players and peripheral issues at once, but we could start with something that everyone seems to think absolutely matters. We have other examples of successful working with Governments, where tobacco, seat belts and certain vaccines have been put on the agenda, at least in the US, and I wonder what you think about how an effort can be constructed that is directed at the G20 that says that we need to decide how we define health for the purposes of their agenda and why it needs to be there and aligning all the stakeholders initially around getting this on the agenda, and so aligning the NGOs and companies that are very active and engaged in a lot of positive ways around this first step. Do you think that this makes sense or what are your views?

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

I would not like to be too pessimistic, and the short-term concern was probably overwhelming the rest, but I have to say that I asked about a year ago by the French Ministry of Affairs, who knew that France was going to lead the G20, about what we could discuss and we tried to put on the agenda the question of counterfeit drugs and the quality of drugs along the lines of Mr [inaudible]. In fact, it never went through because quite a number of other priorities came ahead of it, as we all know. There is therefore still a long way to go and you know better than I, but the way that the G20 has developed in recent times [inaudible] tackle some of the key issues.

Steve HOWARD, Founding Secretary General of The Global Foundation

You are right about the French experience and let me just tell you briefly about what we have been doing. We have been working with Alain Juppé, the Foreign Minister, whom we hosted in Australia in September, but we were too late in the year in the French cycle to elevate the game. However, Mr Juppé is very keen and supportive of what we are trying to do going forward. The Mexicans now have the G20 for a short period of time and then it will be the Russians, followed by the Australia and then Turkey.

To just give you a quick thumbnail sketch, the notion is to form an Eminent Persons Group that is not appointed by the Governments but which appoints itself. My organisation is called The Global Foundation, and we heard about arrogance at lunchtime and we can be arrogant enough to take on anything we want. However, Jim Wolfensohn, the former President of the World Bank, is very involved with this and a number of other senior figures are very interested in being part of forming an Eminent Persons Group that gives advice to the G20 leadership and helps to shape the agenda so that the agenda does not just come from inside Governments but also from the global citizenry. It is such a simple idea that it might actually work. As I said, it has the endorsement of Foreign Minister Juppé in France and President Barroso in the European Commission has endorsed it as well as my Prime Minister in Australia. Everyone that we talk to about this idea, as it gathers momentum, is very attracted to it.

The notion is to say that if the G20 leaders, who are 80% of the world's GDP, are meeting in this way, do not waste it and put the big issues on the table. Personally, I think that they should move away from the crisis management of last week's financial crisis or the Greek Government collapses into something that we need, which is more of a five-year, strategic horizon with the bigger issues. I think that health has to be part of that agenda. It has to be part of an integrated agenda on, as you call it, social organisation.

I am therefore not pessimistic. I am an Australian so I have to be optimistic. That is therefore one way of encouraging it to happen and there may be other ways. Perhaps this organisation, the World Policy Conference, building a dialogue and talking to the WHO and others might be another way. However, I think that my key point would be that these days the things that are changing the world in policy terms are not generally coming from within Governments but from the outside and Governments are implementing them. I would not underestimate the power of ideas and citizenry or the power of private companies. These two companies in particular employ 240,000 people between them in the world, which is an enormous amount of leverage just from their employees alone.

I therefore think that there is a pathway for saying that it is not on the agenda and we think that it should be on the agenda. Perhaps we can propose that it should be on the global governance agenda and the G20's agenda and work towards that.

From the floor

Let me briefly break in as a non-healthcare expert, but cross-sector expert. If global health policy is simply about shipping in some generics and vaccines and deploying the European medical model to Africa and Asia, I believe that we are completely on the wrong track. I will give you two pillars and principles for global governance. Firstly, the need to align at least four or five different policies: healthcare, environmental policy, education and energy policy – and I have just come from the energy workshop. Professor Yunus from Bangladesh was in Vienna four weeks ago at the Social Business Conference and he showed how the inter-linkage functions. If you empower people to the change the top status, the healthcare status will also change. I therefore believe that these cross-sectors need to be aligned.

Secondly, and much more importantly, I believe that global governance means local empowerment. People have thousands of years of experience of local medicine, local substances, local herbs and local expertise and so on and you can simply help deploy that instead of shipping generics or vaccines around the world. In my mind, this is an old-fashioned strategy. We know that in Latin America and Africa and even in Europe there has been an on-going tradition for thousands of years and what we are currently doing in Europe is to exploit all this local heritage. In

Germany, Austria and other countries, we are going for Chinese and Indian medicine and are currently moving away from the traditional way of healthcare policies.

Participant

However, that does not mean that they are efficient.

From the floor

This is efficient.

Participant

That is nonsense.

From the floor

In the past, the local people in these countries instead of deploying European policies – I am really surprised. If you ask Professor Yunus and attend his conferences, you will easily see how this works in India and Bangladesh and even in Africa now, and it works cheaply. We do not need billions of dollars of funds to deploy it.

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

Not to go too far on this, if you think about tuberculosis or polio, there are typical cases where eradication comes from vaccines.

Participant

[Inaudible] point and we probably said this when you were not here. We said that you have to have a social system that enables people to solve at the same time the question of the environment, food security, education and health. We therefore agree on that. On your point on the efficiency of traditional medicine, I have been studying that for 40 years and there is absolutely no evidence for it. There is some debate about acupuncture, but the rest [inaudible] and everything else, you have some [inaudible] in France when bones are displaced and you can play God because we know that there is the placebo effect – a placebo cure. Even if it is a bit of bread with some sugar, if you say that it is the most efficient [inaudible] from industry in 80% of the cases. There is a world debate and this issue is reasonably well known. Even in China, when you push them about what they call traditional medicines they know that there is not much behind it.

I think that it is a bit condescending to say that. I agree with your first point, but the second one is really [inaudible]. The pharmaceutical industry has been looking for decades all over the world about what we could learn from 'medicine' and from that we got opium for a few centuries [inaudible] and a very limited number of products which were efficient.

From the floor

You therefore believe that local empowerment is not important.

Participant

I said that I agreed with that, but not on your second point. Local empowerment is very efficient. I do not believe that any myths of efficient drugs or medical practices somewhere in the world that we do not know about really generates any improvement. If you have tuberculosis or a bacterial disease, antibiotics are better than homeopathic medicine or plants or whatever it might be. *C'est comme ça*.

Steve HOWARD, Founding Secretary General of The Global Foundation

I cannot comment on the medical question but I agree with you on the principle that you elucidated where as you have stronger global governance you must, as a corollary, have stronger local empowerment. It is the return to village life, as it were, and it is becoming very significant in our total human sense. I think that that is a very important principle.

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

Are there any other comments?

From the floor

[Inaudible] particular point we could emphasise to help produce some ideas in the field. I have listened to all of you, but what do we do now? I agree totally with my colleague. I think that you did not understand because what he said about genetics is very important in my opinion because with the pharmacogenetics system you can now test your cytochromes, for example, and then adapt a regular type of drug to a specific patient. It is not a case of inventing new orphan drugs, if I follow you. It is a very simple system that could rapidly individualise our medical practice to the benefit of everyone. This reference is now in all the medical compounds saying that these words go through cytochromes A34 or whatever it might be and this could be a very practical way of trying to improve the level and security.

My other question would be how do we fight fake drugs and vaccines? This is quite a problem. I spend a lot of time in Africa, particularly Senegal, and this is a very important point that we have not mentioned. Additionally, what about the new system of communication, with the Internet and Facebook and so on? We have not said a word about that.

Petra LAUX, Head of Global Public Affairs at Novartis

We work on personalised medicine and while there will be a tremendous difference, it will not change medical practice overnight, for a couple of reasons. One reason is that there are only a few compounds that are going to be accompanied by a respective diagnostic and it is a multi-year process. It is therefore not going to be that, overnight,

you will just be able to choose whichever product works because again there is a lot of research behind it and while we have a couple of diagnostics in our portfolio already, we do not yet have the compounds where these actually work against the disease and the biomarker that the diagnostic is detecting.

What it will do in technical terms is that it will make the decision of the doctor to apply the right medicine easier. Currently, it is a little bit of trial and error whether the compound works with you and it is still a very individual approach to therapeutic treatment. This will be more mechanistic as you have the genetic makeup. The position of the treatment will therefore be higher. However, there are all sorts of ethical questions around this that have not been solved yet and the business model has not been solved either, so I do not see it as a process that will revolutionise medicine overnight.

Participant

Let us say that you have these kinds of accidents that can occur in France, do you then take your drug out of the market because it has killed some specific, genetic patients affected by bad results?

From the floor

[Inaudible] what is going to happen [inaudible]. It is only a few linked diseases.

Participant

Yes, but it could be a political decision to help and go in that direction. Is that not what we are looking for?

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

It could be and I would not say that it does not exist and again this takes us back to Government governance. However, it exists. Petra's point is definitely right that it is only with some cases. As Mr [inaudible] mentioned, a lot of drugs have been developed to treat the symptoms but there is very rarely a cause. We are moving into the region to identify where the cause is and what type of –

From the floor

Change the law [inaudible].

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

Yes. However, this is [inaudible].

From the floor

[Inaudible].

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

In terms of being a little practical here, what will we say after this session? What have we actually said? What is it that we are proposing?

From the floor

I agree with you regarding a practical proposal, but I would say that we need to fly at a higher altitude for the moment and I really like the idea of this Eminent Persons Group or looking at how all these different constituencies of business, NGOs and the people that were mentioned such as Wolfensohn, and some Government officials could align behind the concept of getting health on the G20's radar. Secondly, there is a big challenge – and you are all experts – in how you define health and what the outcomes should be.

A very interesting example was Petra's example of malaria drugs and whether it was really the pharmaceutical companies' problem to ensure employment in places or whether the outcome is helping the greatest number of patients with the best financial efficiency in the most ethical manner or whether you are somehow getting tied up in other issues. I think that defining the outcome is therefore going to be very complicated. However, at this stage, we are probably at the level of something like how you rally the G20 to get it on the agenda before perhaps getting to the level of specific medical issues, be those the one that was raised or herbs in China or anything more specific.

From the floor

With herbs, for instance, Médicins Sans Frontières has done some papers and we use Artemisia in Africa now and it works.

Steve HOWARD, Founding Secretary General of The Global Foundation

If it helps, to underscore that point –

From the floor

We make it available and there are some others as well.

From the floor

[Inaudible].

Steve HOWARD, Founding Secretary General of The Global Foundation

It might be possible to do something at a couple of levels. One is to agree at a high level, as Susan said, which I would support, that health should be on the G20 agenda in an integrated fashion. I recommend that. Underneath that, taking your point, without getting into contests –

Participant

No. It is not a contest.

Steve HOWARD, Founding Secretary General of The Global Foundation

- I think that what we are hearing today is the importance of the players and the industry actually driving towards an agreed health agenda, which is a process that does not seem to be out there in the way that we would all like it to be and which could be pushed forward.

From the floor

Could you say that differently and that it goes in your direction? Again, what counts for a family or child anywhere in the world is to have shelter, not to be threatened and to have food and water, if possible, and a sewage system. We know that when you have that and you fight against some basic infectious diseases through vaccination you reach a level of life expectancy that is very high and which was won in France 40 years ago. When you want to improve health and medical care there are a few things that count and those things should be available. Either you have access to clean water or you distribute vaccines and so on and so forth.

There is then a second step which is that when that is reached how can you access the medical knowledge and drugs that have been invented and are accessible? Again, that is a question of generics. For people at the level where they buy the generics in the African market, how can they be sure that the generic that they are buying is a good one? The example that you took was that you can use codes or whatever it might be to be sure that what you are buying is what you should be buying.

Steve HOWARD, Founding Secretary General of The Global Foundation

This relates to standards and collaboration –

From the floor

No. Even at a world organisation we could have people controlling the quality of generics. However, again – and Petra Laux said it – to distribute or prescribe an efficient drug you need to start to train nurses and doctors and have a medical care system that is efficient. We also did not talk about surgery, but surgery is the only way that people can be cured in some cases. As you know, in this country there are a lot of road accidents and so on and a lot of orthopaedic surgery can be very useful.

When you look at very developed countries you then realise that at a certain level medical care cannot do much because, as you know, when you are obese there is no way of going back and being thin again. The likelihood of getting thin when you are obese is like that of winning the National Lottery. It does not exist and is one in 10,000. The problem in our countries and America is linked to that. When you look at Morocco, the fact of changing life in Morocco leads to an epidemic of diabetes, which is linked to obesity and is very high. 50% of health expenditure in Morocco is already what we call in France chronic disease. In France, it is 70% for chronic disease.

When you want to have a world policy you have to be sure that you tackle the different levels and the limiting factor for different countries is not the same. For example, the limiting factor in Greece is honesty. Everybody cheats on everybody else, in order to have a nurse at nights you have to pay her. That is not the limiting factor in Morocco, Iran, Algeria or American or France or Germany.

Jérôme CONTAMINE, Founding Secretary General of The Global Foundation

[Inaudible] something that happened that is important is that we could agree that there is a need to put health together with education, food, water supply and basic needs on the agenda, particularly of the G20. However, at the same time, we need to recognise that that is not enough. We cannot just say that that is it and then you have the private players and the industry. You clearly need to have intermediate levels because it goes into Governments and local empowerment, which involves particular systems and training and getting nurses and the right physicians, as well as education and the education of people. That is also missing. I think that the industry as such – and I hear here and there that the industry can be criticised – can really provide viable drugs at an affordable price, and the point on the controlling and the quality of generics is a good one. This is what we can do.

Another point that has been raised more is how we evolve and take advantage of new science – all these questions on genetics – and this is something that is progressing whether we like it or not and this morning we had the discussion at the beginning of the meeting on innovation.

From the floor

May I add an idea? When we discuss this – and I have been doing it for 40 years on health policy – we have reasonably good data for developed countries. The WHO is really doing a very bad job on health statistics and health information when you are trying to understand and get some data on even things such as basic care infection and basic diseases. We therefore can play it for better information systems on health statistics in general and even health statistics in particular in many countries and, more than that, in terms of exchanges between countries. The World Bank said in 1978 that the state should not intervene in health policies [inaudible] and that is a mistake. I think that in conferences and exchanges between these countries on how you proceed, it is not obvious. How do you create a system, what are the limiting factors and where do you start? Developed countries do a little bit of exchange. We all know something about the United States and the Germans know France reasonably well, although the French do not know Germany well. There are very few exchanges on health systems and health policy and so on anywhere in the world.

Steve HOWARD, Founding Secretary General of The Global Foundation

That is why I like Petra's idea about [inaudible] framework. There are a number of questions that are unresolved.

From the floor

Yes. What I am saying is about the consequences of the idea and how you could go one step further and build up statistical data and so on. The WHO is a strange organisation.

Steve HOWARD, Founding Secretary General of The Global Foundation

You could decide to generate this as a starting point from here.

Participant

I would like to point out one other thing because I said that we need medical doctors (MDs). How do we stop the stealing of MDs trained in Africa? Two out three will never return to Africa. We train them at a cost for the country. They then go to France or elsewhere in Europe or Canada or wherever it might be and never return. There is something unfair there. However, what can we do?

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

Do you have any idea?

Participant

I am just pointing this out. This is global health governance, in my opinion. We have to point out these kinds of problems. The President of Senegal said recently that he will train them over five years so that people will not be able to steal them from him.

Petra LAUX, Head of Global Public Affairs at Novartis

The only thing that you can do is to offer them a decent life back home. Is it actually the same for medical doctors as other professions, such as engineers? Is this specific to health?

Steve HOWARD, Founding Secretary General of The Global Foundation

We have this problem in my country –

From the floor

[Inaudible].

Petra LAUX, Head of Global Public Affairs at Novartis

The solution is therefore to raise the economic standards back home. That is it.

Participant

It is a big problem.

Petra LAUX, Head of Global Public Affairs at Novartis

I absolutely agree. There are many big problems. When I was thinking about what I could propose, this could be a parameter – the retention of health staff. Living in an industry that is performance management, as soon as you start measuring something, you put energy behind it. That is my only point. If you have a framework, you can put whatever you want in or out, depending on what the stakeholders think is the most important. However, once you start measuring and looking at things through the point on local empowerment – and I actually said this early in my introductory remarks – I do not think that we need a global governance system because it will not work. What we need is global standards that are then enforced locally. That was my proposal – adapting to the local situation. Each country can then think about how they do it, although there might be some solidarity in jointly agreeing this as an aim.

From the floor

Building on what you are saying, do you then link it to growth and productivity [inaudible]? If this framework works, will it work in countries in Africa in an African way?

Steve HOWARD, Founding Secretary General of The Global Foundation

The global health framework that Petra is going to lead, as it is her idea, will have a number of parameters identified, such as the retention of doctors or whatever it might be, or fake drugs versus legitimate drugs and so on. You can build the framework over time and it can be started and built together. The World Policy Conference (WPC) does not have to do it for you; it can be done by those who have a commitment to making it work, starting here. You have a beginning.

From the floor

[Inaudible].

Jérôme CONTAMINE, Executive Vice-President, Chief Financial Officer, and Member of the Executive Committee of Sanofi-Aventis

Thank you, everyone, for this interesting debate.