Interview with Sir Michael Marmot

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Conducted by Dr Thomas Mattig, Director of Health Promotion Switzerland,
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Sir Michael Marmot, you are Professor for Epidemiology and Public Health at the University College London, and you were also the chair of the WHO "Commission on Social Determinants of Health".

What is your definition of health?

Well, we take the WHO definition, which is really rather important because it emphasizes the social and psychological dimensions as well as the physical health dimension. And also, it emphasises the fact that it's not only the absence of disease. It's a positive concept.

Why are the rich healthier than the poor?

It's a good question! In a way, I would say, it's not quite right way to ask the question – for two reasons: Firstly, if you look at how health is distributed, it's not only that the poor have worse health than the rich, but it's a finely graded phenomenon. In other words, if you, for example, look at tenths of the distribution of income amongst the population, in general what you find is that those second from the bottom have better health than those at the bottom, those third from the bottom have better health than those second from the bottom up, all the way along the distribution. So what we find is people in the middle have worse health than those at the top, but better health than those at the bottom.

So asking the question "why are the rich healthier than the poor?" is really not quite the right – it sends the wrong message. And that is very important because people in the middle have worse health than those at the top. It's not so much rich and poor. And in fact I don't think income really is the right way to think about it. I think it's importantly related to where people are in the social hierarchy, and what that allows them to be and to do – the freedoms that allow them to be and to do.

And I think that this is also a way of thinking why people in rich countries have better health than those in poor countries. And again, it's finely graded. And it's not just income. But I think the social circumstances allow the people the freedoms to be and to do.

How do control and empowerment affect health?

When I talk about the freedom to be and to do that's a formulation that Amartya Sen4 used thinking about fundamental freedoms. But it's very consistent with what my own research has shown which is about the importance of control.
Now, we've looked at it in the work place and we show that control over working circumstances is very importantly related to biological stress…..
You can show this in psychobiological laboratories as well. So we show that people who have more control over work have, in some, lower activities of the hypothalamic-pituitary adrenal axis, the cortisol mechanism, and the balance between sympathetic and parasympathetic – the sympathetic system, is favourable. In other words the lower sympathetic drive higher parasympathetic … So if you are asking me how, we have good biological mechanisms that link people's control over their working circumstances.

If we look at empowerment more generally and the line we took on the WHO Commission on Social Determinants of Health, we need to think of empowerment as a psychosocial concept along the line such as just being described – "How much control people have over their lives?"

But also as a material concept: if you don't have clear running water and have to walk eight kilometres to get water you cannot be empowered. If you haven't the money to feed your children, you cannot be empowered.

So material deprivation is a source of disempowerment and, the third, its political empowerment, it's having voice, being heard, actually affecting the conditions that affect your community.

And we see, for example, in British Columbia looking at first nation's aboriginal communities, and classifying them according to the degree of empowerment of the community, and you can see that those communities that are more empowered, that actually control more of the fundamental factors that influence daily life, the more empowered the community, the lower the youth suicide rate. So empowerment is quite fundamental.

Aren't social differences and therefore social inequalities in health inevitable? What are social determinants of health?

It is certainly true that all societies have inequalities and it is certainly true that some countries are rich and some countries are less rich, and some countries are bit poorer and some are more poor. But these change. Look at a country such as Argentina. Argentina in the early part of the 20th century was one of the richest countries, and now it's a low income country. 20% of the Argentine population live on two dollar a day or less. It had a dramatic, catastrophic change in its economic fortune. So if we look at health for example, in Argentina, a country that once was rich and now isn't – I mean it's not bad. It doesn't look like a typical low income country but it's not right up there with the richer countries.

And then we look at a country like Chile that was a poor country. It was a poor developing country: rapid population growth, high infant mortality –absolutely dramatic improvement in health! It actually went from being a poor developing to – in terms of health – looking a respectable rich country. In fact in income it's still a middle income country.

So firstly when we look among countries, between countries, these things can change very rapidly. So we shouldn't say "There were always social inequalities, so there will always be social inequalities in health."

Life expectancy in Chile now is longer than in the United States of America, despite having about a quarter of the income purchasing power parities. So these things can change dramatically.

When we look within countries, I don't know of a society where there are no socio-economic differences. There are always going to be socioeconomic differences. There will always be inequalities. There will always be hierarchies. But the important thing is, that the magnitude of those hierarchies, the magnitude of those differences, and the link to the place in the hierarchy, can vary, and the health differences vary; they can be bigger or smaller.

So for example, look at what has happened in Russia. When the Soviet Union collapsed and health got worse in Russia, life expectancy got shorter, mortality rates went up – but it looks very different depending on where you were in the hierarchy. People with university education had an improvement in life expectancy in adulthood. People with elementary education had deterioration in life expectancy in adulthood. So the gap between those with more and those with less education widened dramatically. So there will always be inequalities in society, but the implication of those inequalities for health differences is not fixed, they can widen and, if they can widen, they can get narrower.

A country like Bangladesh for example, we have seen the under five mortality, the social gradient (and I emphasize that there we shouldn't only be looking at the difference between top and the bottom – but it's a graded phenomenon) – the social gradient of the under five mortality in Bangladesh got shallower.

In other words people second to bottom improved more than those at the top and those at the bottom improved more than those at the top. So the gap between the top and second bottom and the bottom decreased. The gradient got narrower.

So, to come back to your question; Yes, there will always be social inequalities in society. But the way those translate into health differences depend on the differences in what we think are the key drivers at health inequalities and how they are associated with social positioning.

How do the various social determinants interact and what does this mean for successful action to improve the population's health?

On the commission of Social Determinants of Health we defined social determinants of health as

- Firstly the conditions of daily life, the circumstances in which people are born, grow, live, work and age, and
- Secondly the structural drivers of those conditions of daily life: inequality and resources, money, power, education, gender inequities and stuff linked to inequalities,resources, money, power.

So that's what we understand by it. And they of course interact. If you are born to parents with low education your chances of getting a good education are less. That's what the data show. There is a close link between how well children do in school and the literacy level they develop and the parents' education. If you do less well at school, the chances of getting a university education or skills get less and you then find yourself in a worse job, so your employment situation may be more precarious, the quality of the work might be worse. You find yourself living in a less salubrious neighbourhood. You have lower income which goes along with that, and so on.

So you can see that it's a bit artificial to isolate one and to say, well, it's just the education, it's just the work, or it's just the neighbourhood. They link.

We think that all of those for example are affected by early child development, before children get into school. I am not saying that this is the only driver – but that is important. And that in return is related to the quality of parenting and it's related to the parent's economic fortunes as well as what they know about parenting.

Yes, all these social determinants are interlinked but that doesn't make it impossibly complicated, it just means that we need to be clear minded in our analyses and clear minded about where the potential interventions are that can make a difference.

When people think about disparities in health they come to think, it's not a problem of us. Why should the individuals be concerned?

It's a problem of all of us, the implications of the gradient, the social gradient, the fact, that people second from the top have higher mortality than those at the top.

I started doing research on this topic in British Civil Servants. Now, in the British Civil Service no one is poor! If you think of poverty in global context of living on $2 a day there is no one in the Civil Service that lives on $2 a day or less.

People that classify as professionals or senior executives, who have good university degrees, have good stable white collar jobs, they are not at the top level, they are not the senior administrators, have worse health and higher mortality than those above them. So those are people with good university degrees, good stable jobs, clear career paths, never a day's unemployment, no threat of job insecurity – and they have worse health and higher mortality than those above them. And those junior executive officers have higher mortality than the senior executives. And the clerical officers have higher mortality than the junior executives. And the paper keeper and the door keepers, they have higher mortality than the clerical officers.

And it's not just the British Civil Service. Robert Erikson in Sweden showed that people with a master's or a professional degree have higher mortality rate than those with a PhD!

So, is this a problem for us? It's a problem for all of us.
Unless you think you are the Queen of England – or let you think you are right at the top – for the rest of us, where there are always people above us in the hierarchy. This affects all of us.
That's one way of thinking about it. Well, me, John, Mary, we are not the highest, so John and Mary are affected by it.

But a second way of thinking about it, and it's linked, is, if you want to take action to address the social gradient in health – not just the poor health of the people at the bottom, but the social gradient

– that implies action across the whole of society. That action implies doing something that will improve the nature of this society in which we are born, live, work and age – and that affects all of us. It affects me, so I might as well be part of the process as well.

What factors contribute to achieve an equitable and healthy society? What are the greatest obstacles?

The Commission on the Social Determinants of Health identified, as they laid out a moment ago,

- the certain conditions in which people live,are born, grow, work and age, and
- the structural drivers of those conditions.

One obstacle to taking action is ignorance, is actually not knowing what to do: "Well Ok, we've got these problems but what do we do about them". Particularly, if I say, in a country such as Switzerland, the United Kingdom or other European countries where we are not dealing with material deprivation. The people at the bottom in the UK or Switzerland don't die of cholera, they don't die of malaria or of diarrheal disease, they die of heart disease and cancer and dementias, the same things people at the top die of, only they just die earlier. So we are not dealing with absolute poverty – and that means that it's quite challenging to know what to do, which is why we have the Commission on Social Determinants of Health.

Now, there is one set of factors that we do know about: whether you smoke, whether you drink to excess, whether you eat healthy food or you are obese, physically active, etc. We know about those, and they are very important.

On the Commission we said we should think not only about the causes such as smoking, drinking, exercise, etc. but the causes of the causes. Why do people continue to smoke? Everybody in Britain, at least, and I would guess everybody in Switzerland knows smoking is bad for health.
Given that they have this knowledge, one of the causes of smoking, and it's not just ignorance. We have to look at the social conditions that give rise to the fact that people smoke, eat fast foods, don't take exercise, put on weight and so on.

So one way to think about it is to look at the causes of these proximate causes. But a different way of thinking about it …– and it comes back to what I said right at the beginning: the freedom to be and to do. I think that empowerment, freedoms are fundamental. How much control you have over your life is fundamental. Whether you are fully engaged as a full social participant in society is fundamental. It may act through whether you are indulging in healthy behaviours but it may relate, for example, to stress pathways. And I think these are very important too. And that's why we need the knowledge, that's why we need the experiments and the examples that show what good action looks like.

Could you recount the most important recommendations of the WHO Commission? Who are they addressed to?

Well, we had three classes of recommendations that follow from what I was laying out:

- the conditions of daily life
- the structural drivers, and
- the third, was the importance of monitoring, of training and research.

And the question is: how do you take action on this?

A first message was that health does not equal health care! Commonly when people think about inequities in health they assume you mean inequities in health care. Inequities in health care are very important, and certainly we said in our Commission's report that everyone should have access, there should be universal access, to primary health care, regardless of the ability to pay.

But if everybody did have access to primary health care regardless of the ability to pay, there would still be inequities in health as much of it arises of these other circumstances of daily life and the structural drivers. And that means that action has to take place outside the health sector. We think it's

of key importance to have the Government involved. But if action is going to take place outsider the health sector, you really need the Prime Minister or the President to sign up to the importance of this.

Now, when we had a big conference in London in November 2008 to, in a sense, launch the report of the Commission on Social Determinants of Health, the Prime Minister, Gordon Brown, came and opened the conference and made a strong speech about the importance of health equity, globally and nationally. So we had the Prime Minister sign up. We had our Minister of Health, Secretary of State for Health, but we also had the Minister from the Environment Department and the Department for International Development. Very important! So, in other words: we aimed our recommendations

- Firstly at Government but across all the organs of Government, not just the Health Ministry.
- Secondly we pointed to the importance of grassroots' organisations of civil society.
  Where governments can't act or won't act, or even if they will, you need community organisation, you need action at the grassroots. Both because it's good in itself and also as it might encourage, stimulate, even shame governments into taking action.
- Thirdly, we aimed our recommendations at the World Health Organisation, but not just WHO, also, and it relates to what I was saying, within a country: it's not just the ministry of health which is concerned but the wider organs of Government, we feel that the other international organisations should get involved, the United Nation's Department Economic and Social Affairs, the World Bank, UNICEF, OECD. We find its very important that other international organisations, such as the European Commission, not just those concerned with health care, get involved.

And we had this general recommendation, one of our key recommendations, was that all policies should be evaluated for their impact on health inequity, not just their impact on health, it's not just health impact assessment, but health inequity impact assessment.

So whether it is a trade agreement under the auspices of the World Trade Organisation or whether it's a decision made by the Minister of Finance within a country, or the Secretary for the Environment within a country, we should look at all decisions with regard to their impact on health inequity.

Can you name one two examples of good practice from countries where social determinants were successfully changed?

What we did in the report of the Commission on Social Determinants of Health was look globally and rather than say that country A is a good one and country B is a bad one, we found good examples from different countries in different domains.

So we would point to an example from the United States on reading, encouraging children to read. We would take an example from the Nordic countries on their welfare policies; we took an example from Bangladesh on women's empowerment and micro credit schemes, and so on. We took examples from countries from all over.

We did point to countries that actually made this explicit, in Sweden for example, in its national public health goals – explicitly set goals for the nature of society improving social capital, investing in the society.

In Britain now, we are concerned with how we take action – I am not saying by pointing to our country that we are a model example but at least it's an example of concern to ask how can we do things better. So if you look in our report you'll see examples from every region of the world of good practice in different domains.

In order to achieve more health equity what country specific recommendations would you make for Switzerland.

The last thing I would like to do is set myself up as an expert on Switzerland, because surely I am not. But I can tell you what we are doing in the UK and I can tell you what is happening in some other countries. Which is they took the report of the Commission on Social Determinants of Health and in a sense took what we saw as problem and made it a virtue.

The problem was, we were concerned with health inequities within and between countries – including some parts of Africa, and rural and urban India, and Latin America, and Glasgow, and Washington D.C., and Russia, and everybody and everything else – a huge possible agenda.

For example we know that education is important – you don't need a commission to say education is important. In the state of Gujarat in India their problem is: how do you create the conditions so that girls can stay in school. They know that education is important. But if they get married off at twelve, or they looking after younger siblings, then they can't stay in school. That's a different problem from Glasgow in Scotland where the problem there is, the girls can go to school, they drop out, they don't do well, and they take blanks on their future carriers, because they don't do well depending on their social background. So in both cases education is important. The way you deal with the problem is quite different.

What we are doing in Britain – the Prime Minister, when he came to the conference in November in London, announced that he invited me to set up a review, to take the report of the Commission on Social Determinants on Health, and ask how we can develop policies specific to Britain. I would hope policies specific to Britain will have a broader application, the very least, to other European countries because we are not that different.

So to come back to Switzerland: I would hope that what might be done in Switzerland would be to take the Commissions report and perhaps look at what we are doing in Britain and say: "Ok, we agree with the domains to which the commission has pointed. What would specific policies look like in the Swiss context that would improve education, and employment, and early child development, and urban settings, and so on?"

So rather than say "Aha, this is what Switzerland ought to do", which to me would be trivial, I would say: "We have laid out all the important areas, my guess is they do apply to Switzerland. Now take the report and say: how can we develop specific policies for the Swiss context?"

What can individuals do to make a difference?

We need to be careful about this! One of the points that have been put to me several times "When you are talking about social determinants of health, where is the individual in all this?
Doesn't that disempower individuals?" And my response is: "Exactly the opposite! We are trying to create the conditions where individuals can have the freedoms to choose for themselves.

And that's what empowerment means. So if you want to go hang gliding as an individual, and that's dangerous, or do winter alpine climbing, and that's dangerous, fine, we are creating the conditions in which you can make these choices.
We are not saying everybody should make choices that minimise risk and maximise good health but create the conditions where they can decide for themselves. So the individual is central to our thinking. But where you have gross inequities in power and money, and resources and education, individuals can't choose for themselves. So the individual in crucial in all this because in the end what we are trying to do is to give the individuals the freedoms to decide, to create the conditions where they have that freedom.

Secondly, as individuals – we are individuals but we are members of society, we belong to organisations where, firstly we are in families, have responsibilities to our families, we are in communities where, members of organisations, we vote in elections – we have responsibilities.
And I would say that if you look at most social advances, by and large, it's the people who drive them, not the politicians who drive them. If the society says "We want to head off in that direction" then eventually the politicians will run round in front in the march and pretend they would be leading it. So the individual has a real responsibility.

And to come back to the central premise of the report of the Commission on the Social Determinants of Health and that was that fairness matter. That fairness should be the key element in all of this. And the way we are organising our affairs at the moment does not privilege fairness over other concerns. Now, if the populations as well as all the individual in this, if the individual says "I care about fairness, I want a good enough society where everybody could have an equal chance of good health, good

education, reasonable job", and we are not doing that, the individual then can be part of the movement that says "I want a society that places fairness at the centre of all considerations."

We are hosting the 20th IUHPE World conference for Health Promotion. One of the questions we plan to address is whether Health Promotion action on social determinants is an effective means to achieve equity and sustainable development. What is your opinion on that?

We shouldn't get tied up in words or movements. In a way, one way of looking at health promotion that it is about social determinants of health. But I think, correct me if I am wrong, most of the people within health promotion are in the health sector. Now the role of the health sector is vital! And I would say the health sector is important in at least three ways – in the social determinants' health agenda:

- Firstly, we need to put our own house in order. We need to make health service more prevention oriented, more health promotion oriented, guarantying universal access regardless to the ability to pay. So there is much we can do within the health sector, and health promotion is important in that.
- Secondly, we need to be the advocates. So those of us who work in the health sector need to be the advocates across Government who have a broader approach along the lines that we have been discussing: transport, early child development, education, environment, the treasury, trade, business, etc.
- Thirdly, we need measurement, evaluation, research. And we care about that, that's part of what we do. We need to make sure we have the measurement systems, the monitoring mechanisms and the research that actually underpin our whole strategy on social determinants on health

Thank you very much Sir Michael. It's been a great pleasure talking with you.

Pleasure to me, thank you.