

an interview with

Professor Sir Michael Marmot

by Gerry Molloy, Co-Editor

Status Syndrome and Health Psychology

Michael Marmot has been at the forefront of research into health inequalities for the past 30 years. He is Principal Investigator of the Whitehall Studies of British civil servants, investigating explanations for the striking inverse social gradient in morbidity and mortality. He leads the English Longitudinal Study of Ageing (ELSA) and is engaged in several international research efforts on the social determinants of health. He chairs the Department of Health Scientific Reference Group on tackling health inequalities and the British Heart Foundation Primary Prevention Committee. He was a member of the Royal Commission on Environmental Pollution for six years. In 2000 he was knighted by Her Majesty The Queen for 'services to Epidemiology and understanding health inequalities'. Internationally acclaimed, Professor Marmot is a Vice President of the Academia Europaea, a member of the RAND Health Advisory Board, a Foreign Associate Member of the Institute of Medicine, and the Chair of the Commission on Social Determinants of Health set up by the World Health Organization in 2005. He won the Balzan Prize for Epidemiology in 2004 and gave the Harveian Oration in 2006.

I had the opportunity to sit with Professor Sir Marmot to discuss his work investigating the status syndrome.

GM: *What is the status syndrome?*

MM: The status syndrome is a term that I coined to describe the close relationship between an individual's position in the social hierarchy and their health. The higher the position in the hierarchy, that is their social status, the better their health. It runs from the top to the bottom of society. I coined that term precisely to make clear that inequalities in health follow a social gradient. It is not simply bad health for the poor and good health for the non-poor. The gradient in health runs from the very top to the very bottom of society and hence the term status syndrome.



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GM: *Health psychology focuses on the psychological and behavioural processes in health, illness and healthcare. What does the evidence from your work say about the role of psychological and behavioural process in explaining the status syndrome?*

MM: There are a number of possible responses to the social gradient in health. The first is that it is inevitable. This line of reasoning runs: hierarchies are inevitable in society and if health is a consequence of where you are in the hierarchy, then it must be inevitable, so there is no point in looking for explanations. It is somehow built into living as a social animal. I don't take that view. I do take the view that hierarchies are inevitable but evidence shows that the health consequences of hierarchies vary within a society over time and across societies. There is not a constant relation between hierarchies and health. The influence of where you are in the hierarchy on your health is contingent on what hierarchy means in a given society at a given time. The fact that we find very strong evidence of the gradient in health now doesn't mean that there is an inevitable link between status and health. That's quite encouraging. It means that we have to understand what is responsible for the link between status and health.

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A second reaction is that the gradient in health must be due to medical care. That is commonly argued in the US for example, where those without health insurance don't have the same access to health care as those with insurance. The assumption is that the worse health of the disadvantaged must be due to lack of health care. My response is that high quality health care ought to be available to all equally, regardless of the ability to pay. However lack of health care is not the major explanation of the status syndrome.

A third response to the status syndrome is that it must be due to behaviours and somehow people are to be blamed for their bad behaviours. The fact is that people lower in the hierarchy are more likely to smoke, eat fewer fruit and vegetables and to be more sedentary in their leisure time. The evidence suggests that these behaviours do play a role in explaining the gradient in health, particularly smoking. To the extent that they do play a role, the question is then, why do we find a social gradient in these behaviours? I don't blame people for their behaviour, I seek to understand it. Why do these behaviours follow a gradient? The second part of this is that in the Whitehall studies, the standard coronary risk factors, including health behaviours, explain about a third of the social gradient in mortality with smoking being the most important contributor. It may be with better measurement some of the other behaviours may have been more important, diet in particular, but still it suggests that some large part of the gradient is unexplained. We have evidence from the Whitehall studies that another important contributor to the gradient is a variety of psychosocial factors, in particular, to use a term familiar to psychologists, chronic stress. So psychological processes are therefore very important both in asking why we have a social gradient in health behaviours and how we understand the relationship between status, chronic stress and disease.

GM: *There has been a great deal of interest in health related behaviour change in health psychology. More specifically much of this work has used various self-regulation theories such as Bandura's social cognitive theory. This theory emphasises individual beliefs about capabilities to exercise control over*

functioning and over events that affect one's life. In your work you argue that the notion that inequalities can lead to inequalities in capabilities and you explain how this is informed by the economist Amartya Sen's work, and that this is a key processes in explaining the status syndrome. Do you think that Sen and Bandura's notion about capabilities are related?

MM: I would imagine that Sen would take a much broader approach to capabilities and that capabilities in his sense leads to functioning across a whole array of domains, so that beliefs about capabilities might be part of that. If you can't control your micro environment, then your capabilities to function must be hampered. So I would say there is some connection between the two concepts. I had been thinking about control over work in the job strain sense, without knowing about Sen's capability theory, but with a passing knowledge of concepts of control and self-efficacy that psychologists discuss. I was quite surprised when I came across Sen's work on capabilities fairly late on in my own thinking and to realise that this is what I had been thinking. Control is a part of capabilities. Giving people control over their work or their home life is enhancing their capabilities. So I think that there are similarities in the two concepts, but that capabilities in Sen's terms is a more expansive notion.

GM: *Do you think that behaviour change can reduce social inequalities in health?*

MM: There is not a great deal of data. At least 10 years ago, a group in York conducted a review of the effect of successful behaviour change interventions in reducing the social inequalities in health. They found that there really wasn't much evidence available. My own view of that is not that behaviour change is ineffective; it is just that there isn't much evidence and there may be a number of reasons for that. First of all it's hard to do randomised controlled trials in this area, which is what that review focused on, so partly it's that the work hasn't been done, because it's too difficult to do and arguably it reflects a particular view of what constitutes evidence. I would say that the observational evidence that we have suggests that behaviours do make an important

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contribution to the social gradient in health. You then get this dilemma about evidence. Take smoking for example. The evidence is that if you raise the price consumption goes down. However the evidence also shows that consumption does not go down among the very poorest when the price is raised. So that those most affected by both the price and the smoking are those that are the least price sensitive. We need to understand this behaviour. Hillary Graham has done some interesting work in this area where she shows that among single mothers on benefits, the majority of whom smoke, giving up smoking is not a priority. They have too many other things to worry about. So clearly smoking is an unhealthy behaviour and one needs to understand the determinants of it and any help that we can give people in unfortunate disadvantaged circumstances to give up smoking we need to do. But we also need to understand the social situation, it's not simply a matter of saying to individuals change your behaviour. Such behaviours have a social context.

GM: *What other areas of health psychology do you see as most important in your body of work?*

MM: There are two other important roles for psychologists that we haven't discussed. One is helping to understand the processes, not just in behaviour change, but other psychological processes that might help explain the social gradient in health. Secondly the work making the psychological-biological links is also crucial. For example my collaboration with Professor Andrew Steptoe has been very important. His work very much informs my own. Therefore I couldn't do what I do without the input of psychology and psychology has played a very important role in my thinking.

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