Commentary: Social epidemiology—a promising field

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The history of science tells us that the rise and fall of scientific disciplines depends on the successes and failures of respective research programmes rather than on the claims expressed and pressures exerted by individual members or groups. In this process, disciplines may even overcome their original paradigm by developing new cross-fertilizations, as is the case, for instance, in molecular biology. At a less prominent level, social epidemiology has evolved as one such cross-fertilization where theoretical and methodological knowledge and expertise derived from social and behavioural sciences (in particular sociology and psychology) have been introduced into epidemiology and public health research on determinants of human health and disease. In its short history social (or psychosocial) epidemiology has witnessed remarkable scientific progress. To mention just a few examples, a social gradient has been identified for a broad range of highly prevalent chronic diseases, and explanations of this gradient have been successfully advanced using models of health-related behaviour and of psychobiological stress research. Measures of innovative sociological and psychological concepts were introduced into prospective epidemiological investigations, and their direct and indirect effects on disease incidence were estimated.

Examples of newly discovered protective or risky psychosocial conditions for chronic diseases include social support, social network, high demand and low control at work, effort-reward imbalance, hostility, self-efficacy and optimism, among others. Above and beyond this prospectively established evidence some of these concepts have been associated with markers of psychobiological or pathophysiological mechanisms linking social environment and cognitive/affective processes in individuals with their physical responses.

Instead of evaluating this body of knowledge Zielhuis and Kiemeney put their energy into identifying a few authors who have used the term ‘social epidemiology’ in a broad way that does not reflect mainstream science. So what?

It is probably time to approach the problem of the role of social epidemiology in biomedical epidemiology in a more critical way than is the case in the Zielhuis and Kiemeney article. Clearly, the causality criteria established by Hill in 1965 remain an important achievement, but we can no longer disregard epistemological advances taking place in contemporary biology and in a growing number of biomedical fields where modern systems theory calls into question simple notions of causality. It may well be that biopsychosocial research on health and illness is better equipped to face these challenges than traditional biomedical epidemiology.

References