Epidemiology: health disparities

First Part Prof. S. Leonard Syme's lecture on ' Social Factors in Health and Disease' delivered at UC Berkeley in 2007, critically views epidemiology and questions its value. When he states in his lecture, " I'll tell you how badly we're doing?" (Syme, 2007) he refers to the dire state in which epidemiology is today. A discipline whose primary objective is to, " prevent disease and promote health" is at present, according to Prof. Syme (2012), failing miserably at its assigned task.

He believes the methodology employed in identifying risk factors within epidemiology is very limited and restrictive. A more broad-minded and advanced approach is required to understand risk factors arising from " living environments" (Syme, 2012), only then is it possible to have a fighting chance at accomplishing the goal of improved health. Taking examples from fields where Prof. Syme has done extensive research, he explains three key areas which require immediate attention in the discipline.

The first area that he refers to in his lecture is, " identification of disease risk factors" (Syme, 2007). He acknowledges that epidemiologists for the past 67 years have been conducting widespread studies across the world to understand and discover risk factors for CHD, " the number one cause of death in all industrialized countries of the world" (Syme, 2012). In consequence, epidemiologists worldwide have identified, " serum cholesterol, hypertension, smoking, obesity, diabetes, physical inactivity and so on" (Syme, 2012) as risk factors. However, they only justify half of the CHDs that happen, not diminishing their importance, Prof. Syme wonders, what the other risk factors would be. He states, " The importance of the missing risk factors would have to be enormous to explain the other 50 per cent and risk factors of that significance are not likely to be missed in our

research" (Syme, 2012). He further goes on to rationalize that the case of CHD is not lone; the same problem appears while studying other diseases. He believes that epidemiologists " have been working with the wrong model of disease causation" (Syme, 2007).

The second area he mentions is that, " few people change their behavior to lower their risk even when they have been informed of their risk status" (Syme, 2012). Giving an example of a study presided by Prof. Syme, in the Institute of Medicine to appraise efforts taken to bring about behavioral change in patients, he discovered that, " success is more the exception than the rule" (Syme, 2007). Upon analysis he uncovered that intervention for change in behavior, always revolved around topics of interest to the researcher or scientist rather than the patient. Issues such as cholesterol or blood pressure, he realized would get more attention than the everyday concerns of the patient, in such an atmosphere of biased interests, behavioral change was hardly possible.

Finally, the last area of concern in the epidemiology model according to Prof. Syme is also the most taxing. He thinks epidemiologists, " rarely intervene on the most fundamental forces on our society that cause most of our problems in the first place" (Syme, 2007). He affirms that this problem does not arise due to ignorance, epidemiologists are well aware of the fundamental forces that drive society and yet, they refuse to work on an effective policy that could help intervene into the social class model and eventually eliminate it all together. The few epidemiologists who have dared to think about this problem do not go further, because they are not able to identify the crux of it all and thus, can never find a path to start on. Epidemiology as a discipline according to Prof. Syme, needs a major

makeover, where focus needs to shift from individual risk factors, to move on to a more holistic outlook that looks at socio-economic risk factors affecting individuals and groups.

References

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