

ens of people said that anyone could easily see this loneliness when you saw so many Americans walking on the street, alone. "Alone on the street?" I said. "That's not evidence of loneliness", I said. People all shrugged at my naiveté. So I returned to Berkeley, this was in 1975, and found another doctoral student who agreed to work on this. That student, Lisa Berkman, had already been thinking about the importance of social networks and social support and took took my loose and primitive question and reshaped it into a brilliant and elegant study showing the health consequences of social connection. For this study, she used data from the Alameda County Human Population Laboratory that Lester Breslow and I had worked so hard to get funded many years before. My view is that Berkman's study, published in the *American Journal of Epidemiology* in 1979, really began to establish the field of social determinants [10]. Her findings were later replicated by James House and his group using data from the Tecumseh study [11]. This was a finding that resonated with common experience and that fit with many of the empirical observations we had been making over the years. And it was entirely consistent with one of the most important contributions ever made in social epidemiology: the work of Emile Durkheim on Suicide [12]. If one is going to talk about the roots of a movement, it is crucial to put Berkman's and Durkheim's work at the center.

In my classes at Berkeley, I provoke all first year students by assigning them to read a significant number of pages from Durkheim's work on suicide. Physicians are especially challenged. Here, in suicide, is a study of one of the most intimate and personal behaviors that can be imagined. Surely, Durkheim notes, this behavior can only be explained by understanding the most intimate personal events in someone's life. And yet, he points out, there is a patterned regularity in suicide rates, over time, in various groups. Some groups have characteristically high or low rates of suicide, over time, even as individuals come and go from these groups. If the causes of suicide are to be found within the individual, he asks, how can there be a patterned regularity in groups over time even as individuals come and go from these groups? There must be something about the groups themselves that causes a higher or lower rate. That something would not explain why only some individuals succumb to the social fact but it would explain the difference in group rates. A better description of the role of social epidemiology does not exist. Berkman's work on social connections was the first modern empirical demonstration of Durkheim's genius. And since her work, of course, the importance of social networks has become a recognized international fact. And it has led me, and others, to think about such concepts as control and other similar factors that might explain inequalities in disease by social class.

The Alameda County Human Population Laboratory has been useful for other important work as well. George Kaplan and Mary Haan used data from this study to do their pioneering work showing that certain neighborhoods had higher and lower rates because of their poverty status and to show that these differences could not be explained by the characteristics of individuals living in those areas [13]. Another Durkheim legacy. Others who worked with this data set were Jack Guralnik, now at the National Institute of Aging, John Lynch, now at the University of Michigan, and Teresa Seeman, now at UCLA. And most recently, Irene Yen. And there were others. The special Study Section authorized by the NIH clearly made an important contribution. And the findings obtained from the Tecumseh Human Population Laboratory, another legacy of the Study Section, has also been impressive.

This is a very sketchy and highly selective personal set of observations about the early years of the movement as I experienced it. I have left out a lot and I have undoubtedly ignored the work of many others at work at that time. The result of all of these efforts, however, is revealed today not only by the appearance of the new books mentioned earlier and by the Robert Wood Johnson program but also by the fact that both the National Institutes of Health and the Centers for Disease Control are emphasizing work in this area under the rubric of "disparities". In addition, the Canadian government has reorganized its grant-giving mechanisms to recognize this work by establishing a new Institute of Population and Public Health. To me, it is amazing to see the changes that have occurred in the last 40 or 50 years.

What is the explanation for this phenomenon? In my experience, these changes have not come easily. In fact, my experience has been that they have come very grudgingly, with great suspicion and wariness. This suspicion, it has seemed to me, was based on the following issues: First, many felt that social determinants were vague, and ill-defined concepts based on poor (that is non-experimental) research. Second, even if research findings were shown to be well documented, it was very difficult to imagine how these social factors could "get into the body" to cause disease. Third, even if associations between social factors and disease were well documented and even if a disease mechanism could be imagined, it was difficult, if not impossible, to see how these factors could be intervened upon. Current work on social determinants is focused on these very issues and with very promising results.

Conclusion

As I look back over the last 50 years, I am enormously impressed, and a little surprised, at the positive changes that have taken place in our work to improve health and