Sociology of Health and Illness : Essay Behavioral determinants of health

Rémy Deshayes

May 7th 2021

Health behaviors - being an important contributor to health disparities - attracted a lot of attention since the second half of the 20th century. The concept of health behaviors is related to actions that are - intentionally or not - undertaken by individuals and end up affecting their health or mortality.

Of course, there is a great variety of conducts that can be flagged as health behaviors but the concept is often narrowed to addictive behaviors such as smoking, using substances, drinking alcohol and day-to-day actions such as exercise, diet, sleep, risky sexual activities and adherence to treatment regimes.

Perceived as actions, health behaviors are often regarded as an individual-level characteristic and the result of a freely chosen lifestyle. However, the situation is not quite as simple as that. Indeed, a rather puzzling phenomena has often been shown empirically: low-socioeconomic status (SES) groups have a tendency to adopt unhealthy behaviors despite the monetary and health costs.

Pampel, Krueger and Denney - in paper [1] - interpret this baffling observation as the evidence that SES disparities in health behavior involves more than freely chosen lifestyles and are the repercussion of the wide gap between SES strata regarding social milieu. This approach can be understood, for instance, with the unhealthy habit of smoking. Okechukwu et al. (2015) introduce the social context of smoking, few economic resources, high stress and social norms supporting smoking would be breeding ground for smoking. That said, focusing on the social origins of health behaviors and the way SES structures social life, the authors in [1] propose a framework where nine latent mechanisms are key to understand the relationship between SES and health behaviors. Among them, three groups can be created.

The first one is mainly around the stressful, deprived and gloomy environment that low-SES people are facing daily.

Indeed, stressful situations, let it be the result of a disadvantaged social situation such as isolation or the result of an economically distressful situation such as unemployment often spark a wealth of compulsive behaviors such as smoking or overeating. Indeed, those unhealthy conducts are often a mean of immediate relief and satisfaction in an undesirable situations. In this context, sacrificing those breathers would be immensely challenging, making it more complex for low-SES people to adopt healthy behaviors.

However, the relationship between stress, deprivation, SES and health behaviors is highly complex and cannot be understood as unidimensional and one-sided. On the one hand, chronic stress is shared among a vast share of the population and even though low-SES people faces more severe stressors they also reports lower level of perceived stress compared to other SES strata. This means that the relationship between SES and measures of stress is inconsistent and that various dimension of stress could have different impacts. On the other hand, stress and unhealthy behaviors have a bidirectional relationship. Indeed, for instance, being stressed often results in inactivity whereas exercising reduces stress.

Often backed by existing literature is the feeling supposedly shared by low-SES people that limited benefits could arise from healthy behaviors. Indeed a gloomy daily life will certainly not trigger the desire to live longer or to avoid unhealthy behaviors.

Furthermore, although healthy behaviors do not require money, different SES status yields different lifestyles let it be physical activities or leisure time and benefits.

The second group of mechanisms revolves around notions of social capital and community affiliation. Based off famous sociology theories from Veblen (1899) and Bourdieu (1984) emphasizing the importance of lifestyle as a source of social distinction, certain health behaviors can denote the affiliation to a SES class. One's health behaviors eventually amounts to a desire to be perceived as being part of a specific community. This very community can also affect health behaviors through two forms of social capital. Firstly, the influence of peers through the concept of *linked lives*, let it be family, relatives and friends, in a network is non-negligible. Secondly, social cohesion and cooperation is believed to be important when it comes to adopting healthy behaviors.

However, the relationship between social capital and health behaviors is not easy to handle and not enough in itself to explain the origins of SES differences in norms that support healthy behavior or why social capital supports healthy behaviors. For instance, Wen et al. (2007) find that an index of social capital is associated with regular exercise among neighborhood residents in Chicago until adjusting for neighborhood SES, which suggests that the relationship between neighborhood social capital and physical activity is either spurious or mediated by neighborhood SES.

This is the opportunity to mention the importance of the neighborhood SES. Indeed, it is believed that the communities shape opportunities to adopt and maintain healthy behaviors. Allcott et al. (2019) shows that better access to supermarkets is associated with healthier diets and less obesity and that regularly healthier food is on offer in richer neighborhoods. However, these kinds of results tends to be inconsistent between countries and could be the result of other phenomena such as higher residential segregation. Furthermore, the relationship between community opportunities and health behaviors is complex and it could be argued that although an association is almost certain, the direction of a causal link is far more uncertain. Indeed, to some extent supermarkets and restaurants offer food that is on demand and physically active people locate closer to sports facilities.

The third group revolves around education and self-commitment. Two mechanisms, first the lack of knowledge and access to information about health risks and second the efficacy and agency revolves around one's education, dedication and motivation. Although, the hypothesis that the lack of information could be the root of the relationship between SES and health behaviors does not seem very credible in modern times - [3], the idea that an extended education period provides the right tools to efficiently solve problems, thus allowing a fair trade-off to the advantage of long-term gain over short term frustration, is much more widely accepted. However, again, this cannot alone explain the relationship between SES and health behaviors as certain health behaviors does not require problem solving skills.

Similarly, personal characteristic such as general intelligence and self-control, perceived from a latent traits perspective, could account for a great share of the relationship between SES and health behaviors. Indeed, studies from the late 20th such as Gottfredson and Hirschi note that smoking involves low self-control, attraction to risk and a notable preference for short-term gain. However, latent traits in general are very complex to handle. Indeed, latent traits could be perceived as confounders to SES and health behaviors. If early traits influence education among other SES variables as well as adult behaviors then latent traits could yield spurious association between SES and health behaviors. However, mitigating this statement, studies generally find a causal impact of education on health.

This is an opportunity to grasp the multidimensional aspect of the SES construct that we partially overlooked until now. Generally, SES is lying on various components such as education, occupation, income and wealth. From those SES variables, education is generally considered to be the most influential. Yet, once again, the relationship at stake here is complex as it could be moderated by various exogenous effects but also because the direction of the link is complex. Indeed, there are three possible reasons - [4] - for the link between health and education. The initial statement is that increasing education improves health. However, alternatively, poor health could lead to low attendance in class and therefore low education. Finally unobserved confounders could be at play.

Now, to get a better understanding of the matter, we briefly review the work in paper [2]. The authors investigate the correlation between educational level and health behaviors - in particular smoking, alcohol consumption, physical exercise and diet, through a comparative empirical study across 21 European countries.

As expected from the remarks made until now, findings tend to show that more educated people follow a healthier lifestyle over those four health behaviors criterion. The interesting fact is that results show inconsistencies across countries. For instance, a wide gap was observed in Easter Europe in terms of diet where less educated people tended to more often have unhealthy eating habits whereas, on the same matter, Northern Europe countries showed signs of equality in terms of diet regardless of the education level.

Now, it is interesting to note that the results we had until now may not be reproducible from one country to another. Culture and religious inertia could be a reason for this. An example of this lies in the work regarding alcohol consumption of Kuntsche et al. (2017), they note that some countries differ in the average amount of alcohol in a standard drink.

Acknowledging theses inconsistencies is also the opportunity to discuss the design of the studies based on self-reported measures which can yield validity questions. Indeed, for instance, the correlation between self-reported and objectively measured physical activity can be quite low at least because the definitions of physical activity vary along the dimensions of frequency, intensity or duration. Similar issues complicate the measurement of alcohol consumption and smoking. Although, for both of these behaviours there are objective measures available - [5].

Noting how certain behaviors can be easier to measure "objectively" than others can lead to uneven data - according to West (2017) much more is known about smoking than about diet. But, it is also an opportunity to reflect on the definition of health behaviours and its link to health outcomes. Although, the evidence of this link is generally stronger for some behaviours - such as smoking - than others - such as diet, each health behaviour has a complex set of relationships to different health outcomes. For instance, while regular binge drinking can be linked to reduced longevity, single occasion binge drinking may be related to injuries and risky sexual behaviors - [5].

The genuine attention given to health behaviors that we mentioned earlier is focused on drawing causal links in order to implement efficient policies that could curtail and prevent the negative effects of unhealthy behaviors. However, the blatant complexity of the phenomena at stake let it be unobserved confounding, causality direction, upstream and downstream factors, clustering effects, multidimensional aspect of the SES construct or even the mere definition of health behaviors, all add a great deal of complexity to policy making. For instance, it is important to have a clear understanding of how much of the observed correlation between education and health can be explained by each phenomena we reviewed in this essay if one wants to efficiently implement meaningful policies.

References

- Pampel, Fred C., Patrick M. Krueger, and Justin T. Denney. Socioeconomic Disparities in Health Behaviors. In Annual Review of Sociology (2010)
- [2] Huijts, Tim, Anna Gkiouleka, Nadine Reibling, Katie H. Thomson, Terje A. Eikemo and Clare Bambra. Educational Inequalities in Risky Health Behaviors in 21 European Countries. Findings From the European Social Survey (2014) Special Module on the Social Determinants of Health. In European Journal of Public Health 27 (Supplement 1) (2017)
- [3] Layte R and Whelan CT. Explaining social class inequalities in smoking: the role of education, selfefficacy, and deprivation. In *European Sociological Review* (2009)
- [4] David M. Cutler and Adriana Lleras-Muney. Education and Health : Evaluating theories and evidence. For the conference *The Health Effects of Non-Health Policies* (2006)
- [5] Mark Conner and Paul Norman. Health behaviour: Current issues and challenges. In Psychology & Health (2017)