

Social determinants and surveillance in the new Millennium

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Surveillance has been a common practice in Public Health (Teutsch and Churchill 2000; Lee et al. 2010; Croft et al. 2009), although, until recent decades, it has been applied mainly to the infectious diseases. Now, that Non communicable diseases (NCD's) are the major cause of morbidity and mortality globally, much attention has been paid to NCD surveillance and, more specifically, to the surveillance of NCD related risk factors. This is often called Behavioral Risk Factor Surveillance (BRFS, McQueen and Puska 2003; Campostriini and McQueen, 2005) to emphasize the importance of risk factors, although, in the practice, BRFS practice covers a wide range of public health related matters (e.g., from vaccination to service access to demographic data).

The major challenge Public Health is facing globally at the beginning of this new millennium is that of “closing the gap” (CSDH 2008), working for reducing health disparities

within and between countries. Particularly national and local public health systems face the challenge of adopting suitable interventions and policies to reduce inequalities caused by Social Determinants (SD; Marmot 2009).

If health outcomes are derived mainly by the agency of key behavioral risk factors, and SD the “causes of the causes” of such risk factors (Marmot 2005), it is dramatically important for decision makers charged with reducing health inequalities to have information both on the causes (risk factors) and the causes of the causes (SD).

In search for what is termed “evidence-based public health” (McQueen 2001), quite often public-health professionals and more specifically health-promotion practitioners have struggled to find suitable information for evaluating the effectiveness of their work. Surveillance data and particularly BRFS data are an important source (Campostriini and McQueen 2005; Campostriini 2007; Minardi et al., this issue) for evidence that can be used to plan, monitor, and evaluate interventions or policies aimed to reduce the effect of SD on health disparities.

The discussion about how to best measure the SD is still open, and much research is needed to agree on how to effectively measure SD to better understand the mechanisms by which generally (but not always) the “poorer” are the more unhealthy. With guidance from the papers published in this issue, we would like to note briefly some particular issues that show why the BRFS approach is a unique source for information on SD and health. As we see in the work of Pfoertner et al. (this issue), there is always something that we can know better about the relationship between poverty and health that is quite often shadowed by conventional measurements. The need to consider a wide range of aspects, not only economical, but also social and cultural (Abel 2008) is quite globally acknowledged, still the “how to (measure)” is under discussion.

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Commonly used single cross-sectional surveys remain a great source of information, particularly for poor countries (Habibov, this issue). In Tajikistan such a survey can provide substantial information on wide policies such as a health care reform. We also see that the panel studies can help to understand subtle (but still relevant) aspects such as the possession of luxury goods as an additional SD aspect influencing (perceived) health status, as shown quite clearly in the work of Bosma et al. (this issue).

Shi et al. and Minardi et al. (this issue) provide an example to fully understand what surveillance can offer with regard to SD and health, and how more research is needed to understand a better way of measuring SD (in relation to health aspects). The article makes clear that just a few variables describing social economic status can offer considerable information, and these variables are already collected virtually in any BRFS system.

So, BRFS can already offer several SD indicators useful to:

- Study the role of SD in relation to behavioral risk factors and access to services over time
- Observing changes, possibly due to intervention/policies.
- Studying the mechanisms for which SD interact with adopting/not adopting a risk factor.

It is the unique characteristic of surveillance systems, notably the continuity in data collection, that allows for studying the dynamics of something (SD and health) that is evolving over time. It is the steady data flow that allows for a unique benchmark to observe the effect of organized interventions or, as in the Australian example (Shi et al., this issue), non-organized events such as the global economic crisis or, looking into the future, climate change.

It is really difficult to find another way to offer effectively and efficiently information useful for decisions with regard to the effectiveness of potential interventions and policy related to health disparities. If we are to understand what is essentially a moving target, one should look for a

moving tool. Surveillance is a suitable tool, and superior to any non dynamic static survey.

In the long run, the BRFS approach that includes the collection and analysis of data on social determinants provides the most appropriate way of assessing the impact of such factors on health. Many in the biomedical world readily accept the notion that the RCT is the sine qua non for assessing the appropriateness of a new pharmaceutical agent. We would argue that a comprehensive systemic BRFS approach is the sine qua non for assessing the role of social determinants and risk behaviors in health and illness.

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