

Surveillance in practice: evidence and effectiveness

Continual epidemiological assessment using representative population risk factor surveillance systems can deliver evidence-based information needed by health policy makers, health planners and health promoters to make appropriate, timely and efficient evidence-based decisions. This presentation will highlight how risk factor surveillance systems can provide evidence for better health outcomes. Chronic disease and risk factor health surveys and surveillance systems developed in South Australia will be used as the example. These surveillance systems have progressed chronic disease and risk factor data collection from ad-hoc population surveys to timely, relevant systems with improved access, use and application of data-driven evidence. Well-informed policy decisions, modification of risk factors associated with chronic diseases, increased emphasis on promotion of good health practices, appropriate targeting of health promotion campaigns (including an understanding of who is at risk and why and how interventions can be undertaken), and early detection of the conditions are all reliant on evidence. Surveillance is also essential for the development of efficient and effective public health services. The examples used in the presentation will highlight: trends associated with BMI over 16 years; the monitoring of the impact of a nutritional campaign in which the consumption of fruit and vegetables was assessed pre and post a major social marketing campaign; physical activity levels across major socio-economic groups; and demonstrate the ability of surveillance system data to be mapped by meaningful geographic boundaries. A major benefit of surveillance data is the ability to analyse by both time and place. Accumulation of data enables analyses by special population groups, not normally surveyed in a cost effective manner (eg indigenous groups, people who care for ill family members over a long period of time), or by chronic disease group (eg arthritis, cardiovascular disease). Often these groups bemoan the lack of large-scale population-wide information for policy, targeting and planning of campaigns. Without powerful scientifically collected data, priority groups often lack a leverage for meaningful debate on these issue when funding allocation and health priorities are addressed. In addition, it is only at the population level that evaluation of the effectiveness of health promotion preventive programs and policy interventions can be assessed to make sure they are addressing all groups within the population. Effectiveness of a sur-

veillance system is measured by the amount and frequency of how the information is used and by the eventual health outcomes of the population. The collection of population health data via surveillance systems is an expensive exercise if data collections are inadequately or improperly analysed and disseminated. By the very definition of a surveillance system, transfer of data into information is mandatory. The lack of an integrated reporting process is a weakness of many surveillance systems, as is lack of timeliness, and often data are collected and analysed only superficially. An effective surveillance system is one that produces quality, timely, data-driven evidence through rigorous collection of self-reported data.

Anne Taylor

PROS, Department of Health
South Australia, Australia