

Used of epidemiological evidence for policy development

ABSTRACT

Background: Epidemiological studies are used to determine the magnitude of health problems, to define their distribution and associated factors and to measure health outcomes of risk factors or behaviours, or even intentional interventions. The capability to generate evidence makes epidemiology a possible useful tool for well-informed policy making. This article aims to explore the use of epidemiology in health policy development.

Materials and Methods: Manual and computerised search was conducted using various electronic and public domain databases. Articles, reports, and publications pertaining to the use of epidemiology in policy development globally and in Malaysia were gathered, screened, and analysed focusing on the Malaysian HPV vaccination policy and the Australian tobacco policy.

Result: Two categories of health policies were identified; allocative and regulatory. Malaysian HPV vaccination policy is an example of allocative policy in which the population at risk are provided with the vaccine based on the epidemiological evidence of high prevalence and incidence of cervical cancer in Malaysian females, high mortality and morbidity burden, and high vaccine efficacy and cost-effectiveness. On the other hand, the Australian plain tobacco packaging policy is an example of the regulatory policy, in which a directive is set to influence the behaviours and actions of public in order to ensure the population health interest and prevent harm. Epidemiology in this aspect has provided tremendous evidence on the adverse effects of smoking, where it is found to be responsible for the largest burden of disease among Australian of all ages in the country. In response, plain packaging policy was enacted to reduce the misleading marketing of tobacco products in favour of the public health.

Conclusion: Although epidemiological evidence is essential in continuous evidence-based health policy development, there are some challenges in translating the evidence into policies. Therefore, epidemiologists' contribution in presenting relevant epidemiological evidence in a more systematic, effective and understandable form for the decision makers is vital in the course of health policy development.

Keyword: Epidemiology; Health policies; Tobacco; HPV vaccination