

# DEVELOPING THE EVIDENCE BASE FOR COMMUNITY-GOVERNED HEALTH PROMOTION AND PREVENTION

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### ABSTRACT

The community governance or management of health promotion together with evidence about the health of a community is essential to the success of community health collaborations and to community empowerment and change. This paper offers an introductory review of the literature on evidence based public health and health promotion and provides a rationale and method for developing an evidence-based resource to support the community governance of health promotion. The review outlines the origin of and current debate around evidence-based health promotion; and presents a model that describes the use of two major forms of evidence referred to as *guiding* and *evaluative* evidence. While two forms of evidence are described (guiding and evaluative) the importance of *guiding* evidence for community-based and community-governed collaborations is emphasised and is the primary focus of this paper. The Australian national health priority areas are introduced, and a second model, which draws attention to determinants of health, inequalities in health and health status is offered. The model will be used to guide data collection and analysis in the first stage of an ongoing research thesis and subsequent health promotion activities with community members in the second stage of the research.

Keywords: evidence-based; health promotion; public health; community governance; collaboration

## **EVIDENCE FOR COMMUNITY GOVERNANCE**

The need for evidence-based health promotion (EBHP) has been acknowledged by the World Health Organization (1997, 2000) as well as by many governments, researchers and health professionals around the world. Evidence for community based and community-governed coalitions or collaborations is no less important and can be used to guide community planning and action around health promotion and illness and injury prevention. Community governance can be distinguished from corporate governance by its focus on communities rather than corporations and wellbeing rather than profits. In a previous article on the concept of community governance, the present author defined community governance as ‘community level management and decision-making that is undertaken by, with, or on behalf of [for] a community, by a group of community stakeholders’ (Totikidis et al. 2005).

Community governance can be thought of as a form of public sector or local governance when decisions about some public issue are undertaken by governments ‘with or for’ the community. Such interventions ‘with’ communities can also be referred to as community consultation, collaboration, negotiation and participation. Community governance also refers to a field of governance in its right when a community issue is managed and controlled ‘by’ community members themselves. This paper supports the latter. Community governance is related to empowerment, self-determination, human rights and community capacity building and thus may be more effective than paternalistic government approaches in addressing community health issues and social disadvantage. The paper will be of interest to *public sector and not-for-profit professionals as well as community workers, groups and organisations* concerned with issues in public health and health promotion.

The community governance of health promotion together with evidence about the health of a community is essential to the success of community health collaborations and to community empowerment and change. This paper offers a review of the literature on evidence-based public health and health promotion and provides a rationale and method for developing an evidence-based resource

to support the community governance of health promotion. The paper draws on some of the themes of the first stage of an action research project presently being undertaken by the author<sup>2</sup>.

## **REVIEW OF ‘EVIDENCE-BASED’ LITERATURE**

### **EBHP: What Is It And Where Did It Come From?**

Public health and health promotion researchers and practitioners often discuss and debate the concept of evidence-based health promotion. Evidence-based practice has its origins in evidence-based medicine and has been traced back to mid 19th century Paris (Sackett et al. 1996).

Evidence-based medicine is rooted in five linked ideas (Davidoff et al. 1995):

1. Clinical decisions should be based on the best available evidence
2. The clinical problem rather than habits or protocols should determine the type of evidence to be sought
3. Identifying the best evidence means using epidemiological and biostatistical ways of thinking
4. Conclusions derived from identifying and critically appraising evidence are useful only if put into action in managing patients or making health care decisions
5. Performance should be constantly evaluated (Davidoff et al. 1995:2)

The advancement of the EBM movement is often attributed to Professor Archie Cochrane (1972), a Scottish epidemiologist. Cochrane was the first person to clearly set out the importance of randomised controlled trials (RCTs) in assessing the effectiveness of treatments, with his work leading to the development of an international organization known as the Cochrane Collaboration which is committed to tracking down, evaluating and synthesising RCTs in all areas of medicine (Royal Society of Medicine Press 2006).

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<sup>2</sup> The author is currently undertaking PhD research on the topic of: Community centred health promotion and prevention in an Australian context. Stage one of the research involves the development of a resource called the Community Health Evidence Base (CHEB). Stage two will engage a group of community members in a health promotion intervention known as the Community Health Information Collaboration (CHIC). Stage three will involve an evaluation of both stages.

With its origins in medicine, the notion of evidence-based health lends itself more easily to bio-medical or clinical approaches and can have different meanings to public health and health promotion practitioners. Indeed, literature on the topic of evidence-based health reveals that it is a debated and controversial topic, particularly in the area of health promotion.

In one of the earlier discussion papers on this debate, Speller, Learmonth and Harrison (1997) pointed out that although a sound evidence base to promote health was urgently required, efforts were unlikely to succeed for three reasons. These were: 'lack of consensus about the nature of health promotion activity; lack of agreement over what evidence to use to assess effectiveness; and divergent views on appropriate methods for reviewing effectiveness' (p. 361). They noted that health promotion methods can include 'awareness raising campaigns, provision of health information and advice, influencing social policy, lobbying for change, professional training, and community development – often in combination in complex interventions. However, health promotion is rarely judged on its effectiveness in all these areas' (p. 361). Some of the issues noted were the need for qualitative research methods and process evaluation, the importance of looking beyond individual behaviour change and immediate change and the difficulty of assessing an intervention among a range of other socioeconomic and cultural factors (Speller et al. 1997).

The evidence debate has been further illustrated by Nutbeam (1999) who claimed that there was a real difficulty in applying evidence-based principles such as those of the Cochrane Collaboration to health promotion. He believed that three main issues should be considered in developing evidence of effectiveness in health promotion. The first is clarity with respect to the meaning of effectiveness and aims to achieve best practice in health promotion. Nutbeam identified immediate measures of effectiveness (short term changes) as those that include changes in individual skills and knowledge or social action; and changes in social norms following educational or community mobilization/development interventions and changes in policy or organizational practices. Longer term changes in the determinants of health can flow from the shorter term changes and include change in individual

health behaviors, socio-economic and environmental conditions (Nutbeam 1999). Secondly, Nutbeam claimed that the intervention needs to incorporate various aspects to have a reasonable chance of success including the need to plan on the basis of an analysis of epidemiological, behavioural and social research on interventions and changes in determinants of health and health outcomes. Thirdly, Nutbeam acknowledged that appropriate evaluation research methods need to be developed in addition to appropriate interventions in response to problems. Nutbeam argued that evaluation methods designed for medical interventions are not appropriate for health promotion interventions, that there should not be a single ‘right’ method or measure to evaluate programmes and that there was no ‘absolute’ form of evidence (Nutbeam 1999). Even so, Nutbeam’s discussion of evidence is clearly centred around evaluation and effectiveness of interventions.

### **Guiding And Evaluative Evidence**

According to McMurty (2002) there are two components of the evidence base that are critical for health promotion efforts. These are:

- Evidence that characterises the linkages between the determinants of health and health status
- Evidence about the effectiveness of interventions (McMurty 2002).

McMurty states that the first type of evidence provides us with information about where we should focus our interventions but that there is also an increasing need for evidence on effectiveness.

McMurty’s ideas of the two types of evidence have inspired the development of the model in Figure 1. The first type of evidence is referred to as *guiding evidence* by the present author while the second type related to effectiveness has been termed *evaluative evidence*.

The model in Figure 1 can be compared with various literatures on evidence-based public health. For example, Nutbeam’s discussion in the previous section was clearly focussed on ‘evaluative’ evidence derived from an intervention. Three other examples are offered following. In the first example,



Figure 1. Guiding and evaluative evidence in community health interventions

Frommer and Rychetnik (2003) named several steps which led to the determination of evidence. This begins with a *public health intervention* in step one and is followed by *evaluation research* (step two); *report of evaluation* (step three), *critical appraisal of findings* (step four) and *evidence on the intervention* (step five). Frommer and Rychetnik's five-step model coincides with the 'intervention' and 'evaluation' components of my model in Figure 1.

Alternatively, Keleher's notion of an evidence base for population health is closer to the 'guiding evidence' proposed in my earlier model. According to her, 'effective population health is modelled on an evidence base derived from two main sources of data: the measurement of health status and risk factors, such as burden of disease (BoD) studies; and by analysis of the determinants of health' (Keleher 2004:100).

Raphael's (2000) ideas on evidence in health promotion can also be compared to my model in Figure 1. His statement that 'health promoters require credible evidence to identify relevant determinants of health, choose activities to promote health, and then evaluate the effectiveness of these chosen activities' (Raphael 2000:355) is a close fit to the tripartite model consisting of guiding evidence, health promotion intervention, and evaluative evidence.

### **Evidence for Decision-Making**

Many authors have stressed the value of evidence for decision-making in their conceptualizations of evidence-based practice. For example, in his discussion of epidemiology, evidenced-based medicine

and evidence-based public health, Jenicek (1997) notes that the evidence base approach is essential at the two levels of problem solving and decision making, in all health sciences, including medicine, nursing and public health. Similarly, in the area of evidence-based health care (EBHC), Jadad and Haynes (1998:2) stated that ‘understanding and application of the basic principles of EBHC may help decisions makers overcome the barriers that hinder adequate utilization of information as part of health care decisions’. The value of evidence for decision making is also at the heart of Rychetnik, Hawe, Waters, Barratt and Frommer’s definition of evidence-based public health which highlights: ‘(1) the use of a particular type of evidence to inform public health decisions; and (2) an emphasis on clear reasoning in the process of appraising and interpreting that evidence’ (2004:538).

According to Lomas (1997) evidence-based decision making is a phenomenon of the 1990s brought about by researchers and a culture of accountability and increasing expectation for formal ‘research evidence’ in the decision making of politicians, bureaucrats, clinicians and industry. However, there is a need for researchers and decision makers to understand each others roles and establish ongoing channels of communication and exchange (Lomas 1997).

Problematic issues have also been illuminated by Brownson, Gurney and Land (1999) in their article on evidence-based decision making in public health. While recognizing the accomplishments of public health during the 20th century such as increased life expectancy due to the provision of ‘safe water and food, sewage treatment and disposal, tobacco use prevention, injury prevention, [and] control of infectious diseases through immunization’ they also stress the need for continuing improvement through evidence-based strategies (Brownson et al. 1999:86). They note a distinction between the ideal, that ‘public health practitioners always incorporate scientific evidence in making management decisions, developing policies and implementing programs’ and the reality, where decisions are often based on ‘anecdotal evidence’ (p.87).

It has been argued that much of the debate around evidence is about the different world views, attitudes and goals of scientists/researchers versus policy makers (Choi et al. 2005, Lin 2004,



McQueen 2001). This may be because policy decisions are made on the basis of many considerations in addition to scientific evidence including values, emotions, and the wishes of various interest groups (Choi et al. 2005). In this climate, one can only hope that if some of the most important decisions about health are not based on scientific evidence; then they are at least based on standards and governance principles such as equity, need, social responsibility and justice, transparency and accountability.

In addition, part of this debate might be about the different types of evidence (guiding or evaluative) needed by researchers and policy makers. For example, evaluative evidence may be of greater importance to policy makers because of their responsibility in allocating funding to programs that have been shown to be effective. New research and programs on the other hand, while critical to breaking new ground, might be perceived as less certain and more risky or might even be misunderstood by policy makers.

## **EVIDENCE FOR COMMUNITY BASED, COMMUNITY-GOVERNED HEALTH PROMOTION**

It is interesting to note that the literature on evidence-based health promotion does not deal with evidence for health promotion that is managed by community members at the grass roots or community level. Yet, on the other hand, health promotion professionals appear to have the highest regard for community participation, autonomy and control. This regard is clearly reflected in the first line of the World Health Organisation definition of health promotion advanced at the first international conference on health promotion held in Ottawa, Canada in 1986, which stated that: 'Health promotion is the process of enabling people to increase control over, and to improve, their health' (WHO 1986:1). Moreover, item 12 of the health promotion report by the secretariat of the WHO executive board stated that:

Improved health literacy is necessary for people to increase control over their health, and for better management of disease and risk. Communications strategies that increase access to information and build the capacity to use it can improve health literacy, decision-making, risk perception and assessment, and

lead to informed action of individuals, communities and organizations. ... Based on sound evidence, WHO's health promotion efforts will target specific populations at risk, taking account of the interface between health status and the broader determinants of health. Priority will be given to implementation of programmes among disadvantaged populations in specific settings. Too often, it is not proven strategies that are lacking, but vigorous and culturally sensitive application of measures that are known to work (WHO 2000:2).

The previous quotation reveals that although health promotion discourse tends to reserve the term evidence for professional level activity, it is clear that the value of public participation and information is encouraged. This is also highly valued elsewhere, for example in the literature on community based health interventions and collaborations. While space constraints do not permit a review of this literature, a critical feature of community based health interventions is that they emphasize the use of education to empower people and provide individuals with information, skills and a supportive social environment that facilitates, reinforces, and sanctions changes (Revenson and Schiaffino 2000).

### **The Case for Guiding Evidence**

This paper argues that *guiding* evidence is important for community-based community-governed collaborations. Information on community health status, determinants of health and inequalities in health is an essential ingredient for the targeting of health promotion and disease prevention efforts. Consistent with the famous 16th century quote by Sir Francis Bacon that 'Knowledge is Power', such information can educate the community about critical public health issues in their community and empowers members with the evidence base for taking action and seeking funding, resources and services aimed at improving community health.

Some of the community based health literature suggests that community members need to identify their own subjective needs and agendas. However, one could argue that keeping community members in the dark about the major health problems and issues in their community; and the health issues that are of interest to governments, policy makers and health promotion researchers and practitioners, is the more disempowering. For example, the present public health focus in Australia at the national

level is largely on reducing the burden of disease, injury and mortality from potentially preventable and avoidable diseases. These include: Arthritis and musculoskeletal conditions; asthma; cancer control; cardiovascular health and stroke; diabetes mellitus; injury prevention and control and mental health are known as the National Health Priority Areas (Australian Institute of Health and Welfare 2005). The need to address determinants and inequalities in health are also common and important themes recognised by governments, researchers and health professionals in Australia and in many countries around the world. These issues cannot be overlooked in community-based work either.

Figure 2 provides a map of the type of guiding evidence that could be collected to provide the basis for community-governed health promotion. This can be viewed as an ecological model because it directs attention to determinants of health and inequalities as well as to health status. It suggests that determinants and community health status can vary in many complex ways among different groups and communities, resulting in differences in health (inequalities, disparities, inequities). The terms in the model are defined as follows.

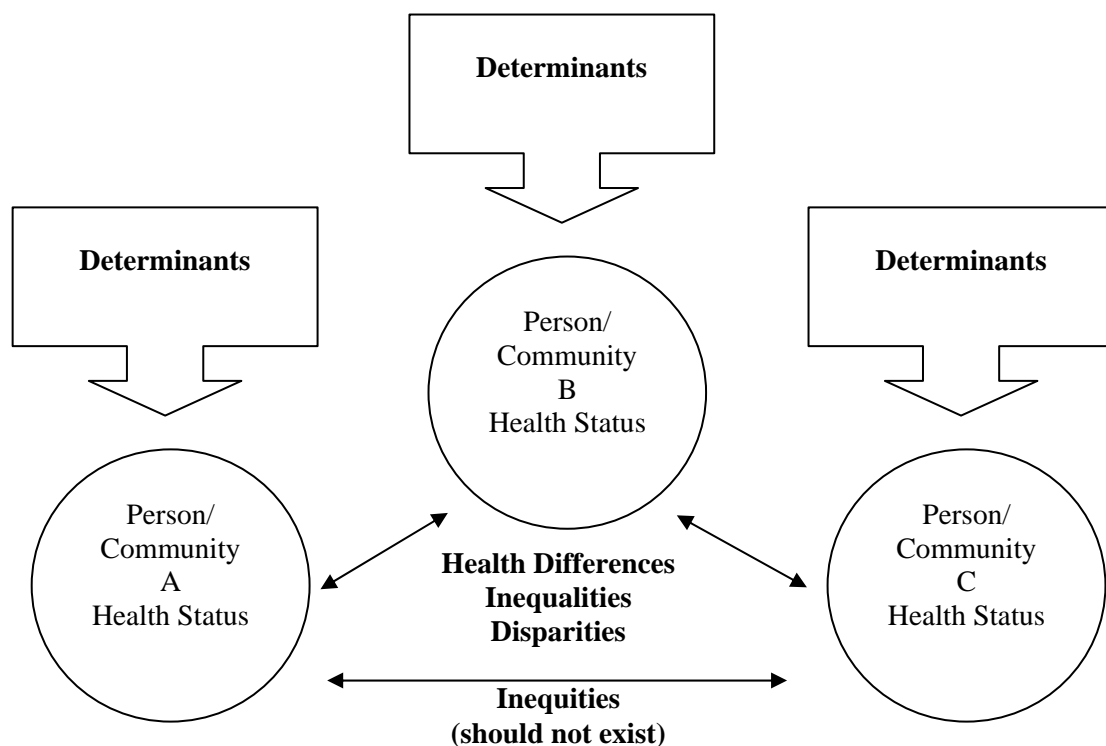


Figure 2. Determinants, differences and community health status model

Determinants of health are the ‘range of personal, social, economic and environmental factors which determine the health status of individuals or populations’ (Nutbeam 1998:6). There may be hundreds of determinants or factors that impact on one’s health, either negatively or beneficially. Some examples include age, weight, gender, culture, drugs, nutrition, poverty, heredity and environmental conditions. Health status can be defined as ‘the level of illness or wellness of a population at a particular time and is measured through life expectancy, mortality, disability and disease prevalence rates’ (United States Government and the Millennium Challenge Corporation 2007:3). Health status can also be defined as the ‘level of health of the individual, group, or population as subjectively assessed by the individual or by more objective measures’ (Biology Online Dictionary 2001:1). Inequalities, disparities and inequities in health all refer to differences in health among individuals and communities. However, as clarified in a well-regarded publication by Whitehead (1991:5): ‘The term inequity has a moral and ethical dimension. It refers to differences which are unnecessary and avoidable but, in addition, are also considered unfair and unjust’.

The *determinants, differences and community health status* model will be used to guide data collection in the first stage of the author’s research thesis and subsequent health promotion activities with community members in the second stage of this research. Data related to health status, determinants and inequalities at the national (Australia), state (Victoria) and local government area levels will be utilised in the development of a resource that will inform community members about the state of health in their community and assist community level management and decision making.

One of the difficulties in developing such an evidence base is that data is only readily available at the national level with less publicly available data at the Victorian and local levels. This is because the primary specialist public data sources, namely, the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare are both national agencies and have a national focus. While these agencies do collect state and local level data, much of the health and mortality data at state and local levels is not available to the public without significant cost. In addition, many of these datasets

are large and difficult to interpret. In order for data to be useful, analysis, summary reports and dissemination of the data need to be undertaken. In a similar way, evidence on health status may be easier to obtain than evidence on determinants and differences, as there are no agreed on methods or consensus on what classifies as the latter.

## **CONCLUSION**

This paper explored the notion of guiding evidence for the community governance (management) of health promotion and disease prevention. It briefly traced the origin and debate around evidence-based health promotion and highlighted the importance of evidence for decision-making. Some of that debate it seems revolves around definitions, methods and differences between research and policy imperatives. While the present article did not enter that debate, it offered two models that contribute to the literature on evidence-based health promotion. The model illustrating guiding and evaluative evidence provided some integration to the literature and delineated the focus of the present stage of the research currently being undertaken by the author. The notion of *guiding* evidence is advanced and explained. The second model outlined critical issues in health (determinants, health status and inequalities) for which evidence is sought. It is envisaged that such a resource, when developed, will provide a valuable evidence base to inform an ongoing collaboration for the improvement of health in local communities.

## References

- Australian Institute of Health and Welfare (2005) National Health Priority Areas. Canberra, Australian Institute of Health and Welfare.
- Biology Online Dictionary (2001) Biology-Online.Org (Online dictionary). In Richard Lees (Ed.), Biology-Online.Org.
- Brownson RC, Gurney JG and Land GH (1999) Evidence-based decision making in public health. *J Public Health Manag Pract*, 5, 86-97.
- Choi BCK, Pang T, Lin V, Puska P, Sherman G, Goddard M, Ackland MJ, Sainsbury P, Stachenko S and Morrison H (2005) Can scientists and policy makers work together? , *BMJ*.
- Cochrane AL (1972) *Effectiveness and efficiency—random reflections on health services*, London, England, Burgess & Son, Abingdon Ltd.
- Davidoff F, Haynes B, Sackett D and Smith R (1995) Evidence based medicine (Editorial). *BMJ*, 310, 1085-1086.
- Frommer M and Rychetnik L (2003) From Evidence-Based Medicine to Evidence-Based Public Health. In Lin, V. & Gibson, B. (Eds.) *Evidence-based health policy : problems & possibilities*. Melbourne, Oxford University Press.
- Jadad AR and Haynes RB (1998) The Cochrane Collaboration—advances and challenges in improving evidence-based decision making. *Med Decis Making*, 18, 2-9.
- Jenicek M (1997) Epidemiology, evidenced-based medicine, and evidence-based public health. *J Epidemiol*, 7, 187-97.
- Keleher H (2004) Public and population health: Strategic responses In Keleher, H. & Murphy, B. (Eds.) *Understanding health: a determinants approach*. Melbourne, Publisher Oxford University Press.
- Lin V (2004) From Public Health Research to Health Promotion Policy: On the 10 Major Contradictions. *Social and Preventive Medicine*, 49, 179-184.
- Lomas J (1997) Research and evidence-based decision making. *Australian And New Zealand Journal Of Public Health* 21, 439-41.
- McMurty R (2002) Why Assess the Effectiveness of Health Promotion? *Health Policy Research Bulletin*, 1, 3-4.
- McQueen DV (2001) Strengthening the evidence base for health promotion. *Health Promot. Int.*, 16, 261-268.
- Nutbeam D (1998) Health promotion glossary. *Health promotion international*, 13, 349-364
- Nutbeam D (1999) The challenge to provide ‘evidence’ in health promotion. *Health Promot. Int.*, 14, 99-101.
- Raphael D (2000) The question of evidence in health promotion. *Health promotion International*, 15, 355-368.
- Revenson TA and Schiaffino KM (2000) Community-based health interventions. In Rappaport, J. & Seidman, E. (Eds.) *Handbook of community psychology*. New York ; London, Kluwer Academic / Plenum Publishers.
- Royal Society of Medicine Press (2006) Effectiveness and Efficiency: Random Reflections on Health Services by A. L. Cochrane (Publisher's Review). London, Royal Society of Medicine Press.
- Rychetnik L, Hawe P, Waters E, Barratt A and Frommer M (2004) A glossary for evidence based public health. *J Epidemiol Community Health*, 58, 538-545.
- Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB and Richardson WS (1996) Evidence based medicine: what it is and what it isn't. *BMJ*, 312, 71-72.

- Speller V, Learmonth A and Harrison D (1997) The search for evidence of effective health promotion. *BMJ*, 361-363.
- Totikidis V, Armstrong AF and Francis RD (2005) The Concept of Community Governance: A Preliminary Review. *GovNet Conference - Contemporary Issues in Governance*. Monash University, Melbourne.
- United States Government and the Millennium Challenge Corporation (2007) Fiscal Year 2007 Guidance for Compact Eligible Countries.
- Whitehead M (1991) The concepts and principles of equity and health. *Health Promot. Int.*, 6, 217-228.
- World Health Organization (1986) Ottawa Charter for Health Promotion. *First International Conference on Health Promotion, Ottawa, 21 November 1986*. Ottawa, Canada, World Health Organization.
- World Health Organization (1997) *The Jakarta declaration on leading health promotion into the 21st century. Adopted at the: Fourth International conference on Health Promotion - New Players for a New Era: Leading Health Promotion into the 21st Century*, Jakarta Republic of Indonesia, World Health Organization.
- World Health Organization (2000) Health promotion: Report by the Secretariat. Geneva, World Health Organization.