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Cochrane update

Multi-sectoral health promotion and public health: the role of evidence

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ABSTRACT

Background Evidence-informed health promotion and public health is an emerging and ever-changing theme in research and practice. A collaborative approach to gathering and applying evidence is crucial to implementing effective multi-sectoral health promotion and public health interventions for improved population outcomes. This paper presents an argument for the development of multi-sector evidence and discusses both facilitators and challenges to this process.

Methods Sector-specific contacts familiar with decision-making processes were selected from referrals gained through academic, government and non-government networks and interviewed (in-person or via telephone) as part of a small scale study to scope the use of evidence within non-health sectors where decisions are likely to impact on public health.

Results The views gathered are preliminary, and this analysis would benefit from more extensive consultation. Nonetheless, information gathered from the interviews and literature search provide valuable insights into evidence-related decision-making paradigms which demonstrate similarities with, and differences from, those found in the health sector.

Conclusions Decisions in health promotion and public may benefit from consideration of the ways in which disciplines and sectors can work together to inform policy and practice.

Keywords evidence, health promotion, multi-sectoral, public health, systematic review

Background

Evidence-informed health promotion and public health is an emerging and ever-changing theme in research and practice. Within and beyond the health sector, evidence-informed health promotion and public health is often seen as 'health sector business'. However, promoting and sustaining engagement between sectors is a core priority for improved population outcomes. The need for this engagement is prompted by the recognition that the evidence required to design, implement and evaluate public health interventions is held sometimes by geographers, town planners and agricultural scientists, for example, for whom public health practice is as much a mystery as pest control to a public health practitioner. Srinivasan *et al.*[1] suggest that policy makers, governments, researchers, health specialists and communities should work in partnership to create healthy environments. Success in health promotion and public health interventions that require multi-sectoral co-operation depends on a collaborative approach to gathering and applying evidence. The complexity of decision-making in health promotion and public health makes the use and development of evidence contentious and challenging. This complexity is compounded by the need for the systematic synthesis of qualitative and quantitative data derived from several sectors and many disciplines. This article explores the use of evidence-based public health policy and practice in contexts where many sectors

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and disciplines might contribute to decision-making. It relates the literature to the results of a small-scale study of the use of evidence within non-health sectors where decisions are likely to impact on public health.

Working across sectors to create and apply sound evidence

There is considerable rhetoric about the need for health practitioners to work across sectors in policy and in practice and for their decision-making to be informed by sound evidence. However, practitioners do not necessarily have the skills or time to participate in cross-sectoral processes. One promising way to strengthen capacity for evidence-informed public health decision-making may be to develop partnerships between health sector practitioners and academics in health disciplines with practitioners and academics in other sectors and disciplines, such as geography, social sciences and information science. Increasing these links has the potential to encourage robust evaluation in other sectors and may promote population health outcomes through research conducted by sectors outside health.[2] An underused method of gathering information across sectors to identify public health priority issues is through cross-sectoral advisory committees. These committees may be useful in recommending relevant databases and/or unpublished literature.[3] In some instances, conducting a deliberative session may be valuable, at which stakeholders share lists of sources and forms of evidence (articles, books, reports and other relevant material) and build a collaborative approach.[4]

Working across sectors is crucial to effective public health practice. In the health sector, it is imperative to gather evidence to support decision-making, to justify selected interventions and to contribute to knowledge.[5] The use of multi-sectoral interventions in public health raises the issue of what constitutes evidence in other sectors, and what part evidence plays in their decision-making processes. To seek answers to this question, we aimed initially at reviewing the evidence that other sectors use in decision-making. We searched the literature within several relevant sectors to examine two matters: first, whether the field of evidence-based practice was established or emerging in those sectors and related disciplines and, second and more particularly, how multi-sector evidence is currently, or could be, generated and/or applied to inform health promotion and public health interventions. Our search identified developments in the Corrections, Education and Social Care sectors to support evidence-informed policy and practice.[6] However, we found that sector-specific or cross-sectoral information about evidence-informed practice was difficult to identify and interpret without sector- or discipline-specific knowledge.

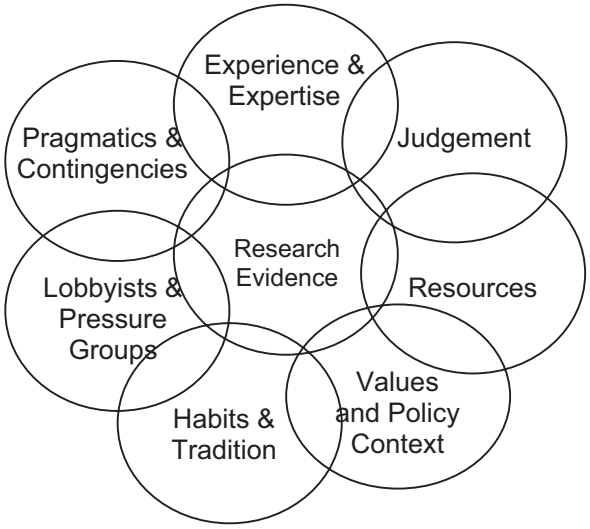

Fig. 1 Know the place of evidence.

The literature search confirmed the authors' expectations that when working across sectors, it is important to consider the emphasis partners place on defining, generating and using evidence. The operationalization of these concepts within a sector influences how that sector's practitioners respond to the request for evidence and to evidence generated in other sectors. Sources of evidence can include: research evidence, experience and expertise, judgement, resources, values and policy context, habits and tradition, lobbyists and pressure groups, pragmatics and contingencies.[7] The balance between different sources of evidence is likely to be affected by external influences such as the extent and nature of political influence in some sectors, or the need to work with the community in others.

The types of evidence required by governments and other decision-makers need to be considered within a sectoral context (Fig. 1). Public health and health promotion competes with clinical medicine for a portion of the health budget; similar competition exists between sub-sectors occurring in other sectors. This is likely to impact on the type of evidence required for decision-making and thus the type of information that is collected to inform the evidence. In the health sector, the requirement is for evidence that demonstrates effectiveness and that interventions do no harm.[8] Here, we can develop synergies with other sectors. For example, in transport decisions about whether and how to build a new freeway may include consideration of the proposal's effectiveness in both increasing traffic flow and reducing pedestrian and vehicle accidents.[9]

An exploration of evidence outside health

To seek information that extends beyond the available literature, we aimed to examine views on the generation, collection

and use of evidence within sectors relevant to multi-sectoral health promotion. Sector-specific contacts familiar with decision-making processes were selected from referrals gained through academic, government and non-government networks. The views elicited are preliminary, and our analysis of them would benefit from more extensive consultation. Nonetheless, they provide valuable insights into evidence-related decision-making paradigms that demonstrate similarities with, and differences from, those found in the health sector.

What evidence means in sectors outside health

From the exploratory study, we concluded that the term 'evidence' was used by those who work outside the health sector to connote the proof that specified approaches are effective. Data, research or evaluation findings were identified as the types of evidence consulted. Some sectors perceived the use or conduct of research or evaluation as a 'real luxury'. There was also an observation that peer review journals are targeted generally at academics rather than practitioners. Gathering evidence was seen as a task beyond the core function of practitioners. These findings support the notion of 'evidence' described by Davies[7] (Fig. 1). Participants were influenced by research evidence but responded to many other influences, including lobbyists and pressure groups, judgement, experience and expertise. To influence decision-making in other sectors, health promotion practitioners need to recognize and understand these other forms of evidence.

Approaches to sourcing and filtering evidence in non-heath sectors

Sources of evidence used to inform decision-making included databases, conference attendance and proceedings, membership on listservs, population health data, universities and networking channels. Generally, evidence was not collected systematically. Sector-specific databases were not always seen to be comprehensive, and intervention research more often described interventions than reported on their effectiveness. These findings are supported by Ogilvie *et al.*,[10] who suggest that in the transport sector, many relevant studies are unpublished. Consequently, these studies might be difficult to find even if there is an imperative to source them. There was also an assertion from the study conducted that practitioners rarely go outside their own sectors to source evidence, a custom also encountered within the health sector.

Extending the use of evidence in multi-sectorial decision-making

There was variation in the degree to which evidence was used by respondents to support decision-making in policy and practice. In some cases, evidence was used for advocacy purposes (for example, to respond to or attempt to shape government policy). Others used evidence to develop funding proposals, to model or determine future initiatives and to report on performance measures. One organization noted that it had been looking 'from the inside out' (that is, relying on internal evidence to inform decision-making) but is now recognizing that in order to compete with other interests it needs also to look 'from the outside in'. To ensure that evidence is used in decision-making, it is essential to report it in ways that enable practitioners to apply it readily to a range of contexts.[11,12] This is an important process in multi-sectoral decision-making, but it is currently complicated by the way in which evidence is generated and reported.

Synthesizing evidence of intervention effectiveness

The 2004 Global Ministerial Summit on Health Research illustrated the increasing support for systematic approaches to synthesizing the available evidence. The Mexico Statement on Health Research produced at the conclusion of the summit identified the need to promote access to reliable, relevant, up-to-date evidence on the effectiveness of interventions.[13] This recognizes that 'reviews of research are a better basis for informing policy than a single study or expert opinion'.[14(p1)] This is supported by assertions that although essential to decision-making processes, systematic reviews alone are insufficient in informing policy and practice and that 'the effects of policies and practice will always remain a matter of judgement'.[15(p235)]

Research evidence for inclusion in a review can be derived from a range of sources and should not be restricted by sectoral boundaries. Although debate continues about the most appropriate syntheses and review methodology for health promotion intervention effectiveness (see for example, Mays *et al.*, 2005[16]), examples can be found across the spectrum from the most rigorous methodology to less structured forms of research and evaluation. Although originally focussed on medical interventions, Cochrane systematic reviews now cover diverse health promotion and public health intervention topics such as injury prevention, the prevention of illicit drug use and policy interventions implemented by organizations responsible for promoting healthy behaviour change. These examples illustrate the acceptance by the Cochrane Collaboration of multi-sectoral approaches to health promotion and public health. This trend is supported and promoted by the Health Promotion and Public Health (HPPH) Field of the Cochrane Collaboration (http://www.vichealth.vic.gov.au/cochrane). The HPPH Field's '*Guidelines on Conducting*

Systematic Reviews of Health Promotion and Public Health Interventions'[3] suggests that caution is necessary when generalizing evidence from one context to another. Hawe[17] acknowledges that researchers increasingly are extending their investigation of context to include inter-organizational networks. Although examples are limited at the time of writing, it is anticipated that research in this area will accumulate steadily.

Conclusions

There is a need to develop a greater understanding of how evidence can be used in decision-making both within the health sector and across sectors. Fully understanding the importance of evidence and its influence in decision-making requires an acceptance that research evidence is not the only form of evidence on which unbiased decisions can be based. Once all evaluation and reporting of evidence includes contextual information that can be used across sectors, cross-sectoral decision-making will be easier to manage. Increasing the accessibility of evidence to practitioners is likely to lead to its more frequent incorporation in intervention design and implementation. The inclusion of contextual information will support complex, yet well-rounded decision-making and smarter and better intervention implementation across sectors.

New Cochrane reviews and protocols from Issue 4, 2005 and Issue 1, 2006

New reviews

- Biomedical risk assessment as an aid for smoking cessation;
- Community-based supplementary feeding for promoting the growth of young children in developing countries;
- Dietary advice for reducing cardiovascular risk;
- Home visits during pregnancy and after birth for women with an alcohol or drug problem;
- Vaccines for measles, mumps and rubella in children;
- Interventions for prevention of drug use by young people delivered in non-school settings;
- Interventions for promoting booster seat use in 4- to 8-year-olds travelling in motor vehicles;
- Interventions for tobacco cessation in the dental setting;
- Strategies to improve adherence and acceptability of hormonal methods for contraception;
- Vaccines for preventing influenza in healthy children.

New protocols

- Advance provision of emergency contraception for pregnancy prevention;
- Interventions for water pipe smoking cessation;
- Interventions to modify sexual risk behaviours for preventing HIV infection in street children and young people in developed countries;
- Parenting programmes for improving the parenting skills and outcomes for incarcerated parents and their children;
- Diet or exercise, or both, for weight reduction in women after childbirth;
- Exercise for positive mental health outcomes in adults;
- Organizational travel plans for improving health. (Travel plans are programmes that aim to change travel behaviour. They aim to reduce single-occupant car use and increase the use of alternatives such as walking, cycling and public transport.);
- Psychosocial interventions for prevention of psychological disorders in law enforcement officers.

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