Sustainable communities: what should our priorities be?

Valerie A. Brown and Jan Ritchie

Background
Recent developments in the field of health promotion address the wider social determinants of health rather than the narrower risk factors of specific diseases. Most urgently, there is a need for attention to be paid to the ultimate determinants of our health, Earth's life-support systems, and the degree to which these systems can continue to sustain life. Reports of their threatened collapse have focused the minds of those in the scientific, political and general communities on how to escape such a fate. For many, the effective unit of response is the community, the interconnected web of people and place that makes up a human living system. This paper identifies the conditions deemed necessary for the promotion of a sustainable and healthy community and makes recommendations on actions health promotion professionals can take to nurture these conditions.

Sustainability as a wicked problem
The warnings of the human-caused disruption of the planet's life support systems are now two centuries old. Naturalists such as John Muir, walking in the wilderness in the 19th Century, saw some of the early signs.1 By 1972, the world's ecologists were concerned enough to issue Blueprint for Survival, of how to survive the human technological impact on this living system.2 The warnings began that the human species is not only equally at risk with other species, it is the primary contributor to the problem.3-5 With a damaged ozone layer, global warming having begun its relentless progress, and an increasing fresh water deficit worldwide, the risks to human health have become apparent in all modes of life and all parts of the globe. The lack of progress in averting these changes has also become apparent.

The biologist-ethicist Peter Singer has assessed the global condition for 2002 through a review of the interactions between environment, economy, law and community. Singer concludes that it is industrialised countries' exploitation of the natural resources of the developing world that has resulted in the changes in the global climate. The physical and economic disruption reverberates around the world in drought, storms, and disrupted food production, in a feedback loop that affects the industrialised countries in their turn.6

Singer explains how international regulatory systems such as the United Nations and the International Court lack the confidence of the world's nation states. The World Trade

Abstract

Issue addressed: Reports of the degeneration of Earth's natural life-support systems have focused the minds of those in the scientific, political and general communities on how to avert a collapse. For many health promotion practitioners the effective unit of social change is the community, the interconnected web of people and place that makes up a human living system. The challenge lies in determining just what makes up a sustainable community under 21st Century conditions.

Method: This paper reviews major national and international programs working towards sustainable communities, in order to arrive at strategies that establish the necessary interconnectedness and collective action within each individual community.

Results: Moving to a sustainable community under these conditions appears to meet the conditions of a 'wicked problem', that is, one that lies outside the present capacity of the society to resolve it. The move therefore calls for guided social change.

Conclusion: The priorities for guiding the change to a sustainable community involve collective thinking and action as a mutual learning process among the affected individuals, communities, experts, and organisations, towards a holistic sustainability goal.

Key words: Community health promotion, sustainability, determinants of health, knowledge cultures.

So what?
Recent developments in the field of health promotion focus on the wider social determinants of health. Added to those determinants is the need to ensure that 21st Century environmental systems can continue to sustain life on Earth. Health promotion practice has come to involve the social change necessary to ensure a healthy, just and sustainable future. Acquiring the strategies of the collective thinking and action that establish sustainable communities is the most constructive way for health promotion to move forward along this critical path.
Organization divides along the lines of resource-rich and resource-poor. Civil society and community struggle to find a place within these clashes of Titans. Singer lays the combined scenario before us as a choice between a risk-based negative approach to the future and directing our actions towards the hopeful pursuit of an ideal.

The conclusions of a report issued by the combined science, health and engineering research institutes of the National Research Council of the United States (US) have been powerfully reinforced by the 2005 Millennium Ecosystem Assessment, prepared by 1,300 experts from 95 countries.\(^7\)\(^8\) These authoritative reports agree that the spiral of environmental disruption is affecting every facet of society. They agree with Singer’s proposition that halting the spiral cannot be achieved in piecemeal fashion or by any one set of interests alone. They call for a new type of collaboration between community, science and government.

Health promotion is well placed to take a leadership role following its experiences over the past century. Social change and the hygiene revolution allowed the first crowded cities to combat their crowd-based diseases. Unprecedented for both health promotion practitioners and their potential collaborating partners is the global reach and the timescale of the 21st Century issues. The remit of ‘health for all’ now includes the future of all living things on the planet.\(^8\) The lead time to halt, much less reverse, processes now in train may be up to 300 years.\(^9\) The all-embracing nature of these challenges to health has coined the equally all-embracing goal of sustainability, that is, “treating environmental integrity, human well-being and equitable development as interdependent and indivisible so that life on Earth can be maintained.”\(^10\)

The persistence of environmental and social degradation in the face of multiple well-informed warnings suggests that the problems facing sustainability fall into the category of ‘wicked problems’.\(^12\) According to Rittel and Webber, wicked problems require whole-of-society change, not short-term solutions. Their solutions require the acceptance of paradox and the incorporation of social learning in a concerted response by all parties. The need is for the integration of multiple sources of evidence and not single, specialised perspectives alone; and for constructive collaboration among all the interests involved. In the case of the wicked problem of sustainability, responses have been at the level of high international policy (such as the Montreal and Kyoto protocols).\(^13\)\(^14\) at individual national government level (such as the regulations around genetically modified organisms)\(^15\) and direct action at the local scale.

At the local scale, the community is the favoured unit for generating social change. In reviews of the field, sustainable communities have some general characteristics. They are utopian, in the best sense, that is, they work towards an ideal, rather than remain fixed on old problems. They are based on whole-of-community learning, seeing the community as a living, growing organism, bringing together community, specialised and organisational constructions of reality. They respect the integrity of living systems at the local and the global scales. They are about directing transformational change, responding to the continued reports that current modes of living are unsustainable.\(^16\)

### Box 1: Characteristics of a coherent, vibrant community\(^19\)\(^20\)

Ife lists 22 markers by which a community is built and maintained from within, summarised as:

<table>
<thead>
<tr>
<th><strong>Characteristics</strong></th>
<th><strong>Description</strong></th>
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<tbody>
<tr>
<td><strong>Collective development</strong></td>
<td>Community-building among the knowledge cultures of individuals, local community, specialists and organisations involved.</td>
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<tr>
<td><strong>Equity</strong></td>
<td>Differential advantage is endemic to a community, and so there are local processes for adjustment and compensation.</td>
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<tr>
<td><strong>Sustainability</strong></td>
<td>Environmental and economic resources are finite, so optimising both sets of resources is basic to community sustainability.</td>
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<tr>
<td><strong>Power relationships</strong></td>
<td>The tensions between the personal and the political, and individual and public issues are an essential tension in any community.</td>
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<tr>
<td><strong>Belonging</strong></td>
<td>A community’s sense of identity lies in its collective sense of belonging between people and place.</td>
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<tr>
<td><strong>Goals and visions</strong></td>
<td>Vital to a community’s existence as defining a shared future.</td>
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<tr>
<td><strong>Organic development</strong></td>
<td>A community is essentially organic (plant-like), rather than mechanistic (machine-like).</td>
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<tr>
<td><strong>Uniqueness</strong></td>
<td>Particular set of attributes of people, place and time.</td>
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<tr>
<td><strong>Inclusiveness</strong></td>
<td>All members are intrinsically part of the community even where they hold dissimilar views – every outcast marks a boundary.</td>
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<tr>
<td><strong>Pattern</strong></td>
<td>A sustainable community contains a diversity of interests, ages, constructions of reality, learning styles, and personality styles, weaving a complex pattern.</td>
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### Lessons for health promotion from sustainable communities projects

Health promotion has a rich history of working with the community as a dynamic interdependent system under the various labels of primary health care, health for all, and healthy cities, to name but a few.\(^17\) Each of these initiatives has taken a strong approach to both community and health promotion. Putnam has labelled the cohesiveness of a community network as ‘social capital’, referring it back to an economic model.\(^18\) A more comprehensive interpretation of the characteristics of a coherent, vibrant community has been developed by Ife\(^19\) and modified for health promotion practice by one of the authors of this article (VAB) (see Box 1).\(^20\)

Early social movements towards sustainable communities include a Canadian Healthy Communities program in 1985. The Mandala of Health developed in that program can, with very little adaptation, represent the dimensions of a sustainable community today (see Figure 1).\(^21\)

The ideas of Hancock and Duhl\(^22\) and of Ashton\(^23\) expanded
into the so-called ‘new public health’ in 1986 with the Ottawa Charter for Health Promotion.¹⁴ The principles of the new public health are closely aligned to the later United Nations principles of sustainable development¹ and now to the more recent community-based Earth Charter principles for sustainability:

- Integrated policies securing intra- and inter-generational equity.
- Protection of ecological integrity.
- Respect and care for the whole community of life.
- Individual access to democracy, non violence and peace.¹¹

While Singer’s prediction that governments will not respond to global environmental change has been fulfilled, communities have risen to the challenge. Industrialised countries have been slow to ratify the Kyoto Protocols, and US and Australia have refused to do so. At the same time, communities in both developed and developing countries have joined in enthusiastic endorsement of the Earth Charter and developed a wide range of locally distinctive versions of sustainable communities. Three examples of national and international sustainable communities programs are summarised below.

**Healthy Cities**

First sponsored by the World Health Organization (WHO) European office in 1987, the Healthy Cities movement to date has spread to more than 5,000 cities worldwide, with more than 1,200 meeting criteria set by WHO. Primarily a collaboration between community, health services and government, many individual cities recruited local businesses and local artists to give the project a whole-of-community presence, for example, Healthy Toronto in Canada²⁵ and Healthy Cities Noarlunga in Australia.²⁶ Factors identified as keys to success include explicit political commitment, strong leadership, institutional change and intersectoral partnerships.²⁷ Slow at first to incorporate sustainability issues, the concept of Healthy Cities now reaches to projects such as a ranking list of 50 sample cities in the US project ‘Green and Healthy Cities’.²⁸ While an excellent example of the potential of the city as a seed-bed for whole-of-community change, Healthy Cities activities have in general remained within the domain of health.

**Local Agenda 21**

The first world conference on environment and development, sponsored by the United Nations in 1992, drew more than 90 sovereign nations to discuss the interdependence of human and environmental futures and the need for unified action. An extensive agenda for implementing the sustainable development agenda into the 21st Century was titled ‘Agenda 21’.⁴ Of the more than 50 chapters of Agenda 21, only Chapter 28 on the role of local government authorities was agreed to by the participating governments. Perhaps unexpectedly, local governments around the world embraced the responsibility, generating Local Agenda 21, an action plan implementing sustainable development principles at the local scale.

Finding a sponsor in the International Council for Local Environmental Initiatives, Local Agenda 21 plans were recommended for all councils worldwide.²⁹ Before 1992, local government in Australia was not considered to hold responsibility for either community well-being or environmental management, but was limited to the old roads, rates and rubbish agenda. By 1994, a nationwide survey of Australian councils found that the councils recognised the need to combine social, economic, and environmental agendas in their strategic planning and in their administrative structures.³⁰ This rapid growth in breadth of responsibility potentially linked

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**Figure 1: The Mandela of Health and the Elements of Sustainability²¹,²²**

![Diagram](image-url)
Healthy Cities and Local Agenda 21 initiatives. Unfortunately, the two initiatives tended to run in parallel, even in the same city, with Healthy Cities sponsored by health services and Local Agenda 21 by local government authorities. The Australian Healthy Cities Project, launched in 1994, was aimed at combining the full range of community services, the citizens and the professions in a whole-of-community collaboration.

### Sustainable Communities

Sustainable Communities as an integrated community, specialist and government project began in Europe in 1993 and spread to North America. The project is characterised by the strong recognition given to the community in the collaboration, and this is reinforced by funding from local community and philanthropic interests. The suite of interconnected aims for a sustainable community were phrased in commonsense and action-oriented terms:

- Living sustainably.
- Creating community.
- Growing a sustainable economy.
- Protecting natural resources.
- Ensuring smart growth.
- Governing community.

Summing up the lessons from a decade of sustainable communities initiatives, one returns to Rittel’s emphasis on recognising the role of paradox in resolving wicked problems. The power base of each of the successful initiatives was also their weakness. Healthy Cities was based in a professional field, Local Agenda 21 in government administration and Sustainable Communities in community consortia. External evaluations judged Healthy Cities as being too confined within the specialised hegemony of health services, Local Agenda 21 as fragmented between social, economic and environmental departments of councils, and Sustainable Communities as vulnerable to manipulation from those other two powerful community influences.

### Sustainable communities as a collective practice

In fostering sustainable communities, a recurring issue has been the need for reconciliation among the different power bases that constitute a viable community. The aim of combining the interests of community, experts and government was central to Healthy Cities, Local Agenda 21, and Sustainable Communities programs alike. However, where any one of these power bases was the dominant sponsor of a sustainable communities program, this proved to limit its overall success in moving to more sustainable practices. Here we have another of the paradoxes predicted for a wicked problem. A sustainable community is built by strengthening each of the contributing sectors and at the same time combining their powers equitably for a collective response.

The Australian Local Sustainability Project explored this paradox in a collaborative action research project from 1996-2002. The project drew on the combined lessons of Healthy Cities, Local Agenda 21 and Sustainable Communities. A series of inquiries investigated local sustainability initiatives working towards a more healthy, just and sustainable future. Each of the inquiries accepted the criteria for a thriving community developed by life (see Box 1) and included the functional elements of community well-being presented in the mandala of Hancock and Perkins (see Figure 1). Each inquiry examined the progress of a whole-of-community change initiative that originated in the power bases of community, experts and government, respectively.

Two of the studies examined the requirements for involving health promotion in collective decisions towards sustainable communities, one based in environmental health practice and the other in ecological public health. Several important lessons emerged for health promotion practitioners. The first arose from the general trend in sustainability projects to combine social, economic and environmental resources (widely known as the triple bottom line). This was a useful direction in theory but problematic in practice. Without access to strong integrating processes, councils and other local organisations set up three parallel accounting strands, which then served to increase existing departmental competition for resources.

Second, each of the three interest groups, community, expert and government, brought a different power base to the collective capacity to arrive at a sustainable community. This led in turn to different constructions of reality and marked conflicts of interest. Each interest group had its own body of knowledge, internal power structure, set of desired outcomes, and language. Each tended to reject the knowledge and language of the others. Their constructions of reality were so distinct from one another that they could be described as different knowledge cultures (see Figure 2).

Third, in order to overcome the conflicts of interest, any collaboration among the familiar trio of community, specialists and government required the commitment of individuals and a shared holistic focus on the issue being addressed. These added two further ways of knowing with their own distinctive knowledge cultures and methods for determining ‘truth’. Thus, there were five knowledge cultures involved in any lasting whole-of-community action towards a sustainable future (see Figure 2).

Fourth, each of the knowledge cultures was divided within itself, requiring an integrating structure of its own before it could successfully contribute to a wider synthesis. The symbols in Figure 2 represent the different integrating structures. Individuals needed to be able to speak freely from their own lived experience, hence the myriad individual dots. Different communities might be connected in space and time, but each had its symbolic stories and events that gave it integrity and vision, shown as a connected wavy line. Specialists such as public and environmental health practitioners had their own differing frameworks and rules of inquiry that determined their separate
approach to a problem, and so formed separate compartments. While governments shared with organisations the practice of generating a planned strategic direction (represented as arrows on a closed circle), different government departments and individual organisations were enmeshed in a competing, not a collaborative, system.

At the outset of the Local Sustainability Project studies, specialised and organisational knowledge cultures were competing for control. Local knowledge generated from within each of the communities was regarded with suspicion and labelled irrelevant to the ‘real’ business of power relations. Individuals’ direct experience was rejected as biased and self-interested, quite often by the individuals themselves. The ruling idea was that legitimate decisions were based on either numbers or on realpolitik, and these were in opposition to one another. An overriding integrated framework that did justice to all the knowledge cultures was badly needed.

Fifth, the solution to the conflicting interests of competing cultures proved to be to escape the ruling hierarchy by working collectively within a mutual learning process. The Local Sustainability Project drew on Kolb’s experiential learning framework38 as the basis for managing collective social change. The text contained tools for each knowledge culture to draw on its own set of principles, problem parameters, potential and practice in learning to work with the others. Health promotion’s guiding principles, practical parameters, potential for creative change, and practical solutions were shared in mutual social learning with the other knowledge cultures, following the stages of the experiential learning process (see Figure 3).

Collective action towards a sustainable community therefore proved to be a social learning matter, not a competition between interest groups. In putting Kolb’s experiential learning cycle into practice, the knowledge cultures required strong methods of synthesis that would allow them to work collectively at each of the four learning stages. Another study from the Local Sustainability Project identified five strands to be woven together by participants in any social learning process. These strands can be matched with the five elements of the new public health’s Ottawa Charter, now two decades old but still the driving force for health promotion practice:

- Reflectivity: reflections on own ideas and actions (enhancing individual capacities).
- Systemic thinking, with recognition of the interdependence of elements of an issue (ensuring supportive social and natural environments).
- Negotiation: respect for the differences between the knowledge cultures (intersectoral collaboration).
- Participation based on equal involvement of all knowledge cultures (strengthening communities).
- Integration of understanding in a collective learning process (reorienting services).37,39

There are three key conclusions for health promotion practitioners to draw from the experiences of working towards sustainable communities. First, the necessary whole-of-community change to maintain global ecological integrity depends on collective thinking and collective action. That, in turn, requires a process of social learning that brings together the different constructions of reality among the participating interests. Health promotion has long experience in both fields of action and so can provide the much-needed leadership in resolving the wicked problem of a humane sustainable future for life on Earth.

Nevertheless, to fulfill its promise, the field of health promotion will need to broaden its field of practice from the specialised health profession to include the other knowledge cultures, individual, community, organisational and holistic. The third conclusion for health promotion practitioners is that they will
need skills in the management of integrated social learning. Health promotion has led public health into concerted social change before, in the cities of the Industrial Revolution and in addressing high-consumption lifestyles. It is needed now to give guidance to learning to live with the impact of people on the planet.

References