

Social Science & Medicine 61 (2005) 1331-1341



www.elsevier.com/locate/socscimed

Utility-driven evidence for healthy cities: Problems with evidence generation and application

Evelyne de Leeuw*, Thomas Skovgaard

Department of Health Promotion Research, Faculty of Health Sciences, University of Southern Denmark, Niels Bohrs Vej 9-10, Esbjerg DK-6700, Denmark

Available online 27 March 2005

Abstract

The question whether the WHO Healthy Cities project 'works' has been asked ever since a number of novel ideas and actions related to community health, health promotion and healthy public policy in the mid 1980s came together in the Healthy Cities Movement initiated by the World Health Organization. The question, however, has become more urgent since we have entered an era in which the drive for 'evidence' seems all-pervasive.

The article explores the nature of evidence, review available evidence on Healthy Cities accomplishments, and discusses whether enough evidence has been accumulated on different performances within the realm of Healthy Cities. A main point of reference is the European Healthy Cities Project (E-HCP).

Building on the information gathered through documentary research on the topic, it is concluded that there is fair evidence that Healthy Cities works. However, the future holds great challenges for further development and evidence-oriented evaluations of Healthy Cities. There are problems with (1) the communication of evidence, (2) the tension between the original intention of the Healthy Cities Movement and its current operations, and (3) the complex nature of Healthy Cities and the methodological tools currently available.

© 2005 Elsevier Ltd. All rights reserved.

Keywords: Healthy cities; Health policy; Community health; Health promotion; Utility-driven evidence; WHO

Introduction

The relation between human health and settlement is unmistakable. In fact, the origins of modern public health can be traced back to rapid urbanization processes in the industrial revolution (Cohen, 1989).

Public health programs that address the broad range of relations between health and settlement are, however, not abundant. One of the reasons for this phenomenon may be the complexity of such programs, operating at many levels (individual and community behavior, organizational and policy development) taking into account the population diversities inherent to modern life—not least in its urban form.

One such program, the Healthy Cities Project (HCP) initiated by the World Health Organization, since its inception in the mid 1980s has been challenged to deliver the evidence that it, in substantial ways, makes a difference when dealing with urban health.

Remarkably, in the twenty years that HCP has operated, very little evidence has been accumulated and/or published in the public domain, in spite of a continuous involvement of the academic community.

It has been argued that the 'evidence debate', at least within public health science, has come to a grinding halt

^{*}Corresponding author at School of Health and Social Development, Deakin University, Melbourne, Australia.

E-mail addresses: evelyne.deleeuw@deakin.edu.au (E. de Leeuw), tsk@health.sdu.dk (T. Skovgaard).

with essentially two positions: those who stick with experimental or quasi-experimental methodological designs for the generation of evidence, and those who take a broader position, arguing that there are many other possible sources and pathways to produce evidence. Either way, Healthy Cities do not yet seem to have lived up to expectations.

In this article, we will explore the nature of evidence; review available evidence on Healthy Cities accomplishments; and discuss the question whether appropriate evidence has been accumulated on different performances within the realm of Healthy Cities.

A particular point of reference will be the European Healthy Cities Project (E-HCP), which from the latter part of the 1980s explicitly has worked—in an increasingly formalized way—to put health high on the local policy agenda and stimulate ways to improve public health by modifying the physical environment and the social and economic determinants of health.

Utility-driven evidence

What should be understood by evidence? McQueen and Anderson (2001) quote Butcher:

A piece of evidence is a fact or datum that is used, or could be used, in making a decision or judgement or in solving a problem. The evidence, when used with the canons of good reasoning and principles of valuation, answers the question why, when asked of a judgement, decision, or action.

There are some unresolved issues in using such a perspective. Particularly researchers equating science with the use of experimental methodological designs would criticize this position as an invitation to use almost any data or opinion as evidence. We will explore precisely this methodological tension.

In a recent position paper by the European Advisory Committee on Health Research (Banta, 2004) the relations between public health, decision making, research, knowledge generation and evidence are presented. The Committee acknowledges the many facets of evidence for public health and singles out Healthy Cities as a prime challenge in the amalgamation of evidence:

(...) a legitimate concern is that research in many areas of "the new public health" aims at actions that are difficult to evaluate, such as those in health promotion. For example, what is a "healthy city" and what are the general and specific outcomes sought? Because of these difficulties, decisions that are mainly determined by good evidence of effectiveness would favor interventions with a medical rather than a social focus, those that target individuals rather than communities and populations, and those

that focus on the influence of proximal rather than distal determinants of health. This would clearly be unsatisfactory for population health activities.

Eriksson (2000) has further mapped these problems. He proposes a distinction between four generations of 'prevention projects' (I. clinical; II. bioepidemiological; III. socioepidemiological; and IV. environment & policy-oriented), based on different theoretical propositions, each of which need increasingly complex evaluation approaches as well as outcome parameters. Generally speaking, Eriksson, with his differentiations, cites an important development within public health research, stretched out over decades, resulting in an increased recognition that much can be gained, especially in terms of reaching many people by changing program delivery or policy, by supplementing the efforts to identify individual determinants of health and health behavior with a focus on social and environmental factors. Recognitions such as these have subsequently provoked efforts to measure, for instance, the impact of manipulating broader determinants of health and discussions on how to expand intervention goals beyond the individual to various community levels.

Birckmayer and Weiss (2000) have demonstrated that application of theory-based evaluation (TBE) yields better research information on various elements of success and failure of health promotion programs. TBE expects researchers and program directors to spell out assumptions to a micro-theoretical level, so that outcomes are not only made *evident*, but also can be *explained*. This perspective offers opportunities to integrate intra-generational 'prevention projects' such as Healthy Cities, drawing heavily on the approaches that Eriksson calls socioepidemiological and environment & policy oriented, and thus unravel and analyze its various components.

These perspectives give, however, indications of *how* evidence is to be produced, but not *for what purpose*.

Ultimately the generation of evidence seems to serve two purposes:

- To assist in decision-making, and thus implementation. In this way evidence is used instrumentally in concrete processes of problem solving.
- To contribute to the growth of a more general, contextual oriented body of knowledge into a given domain—in this case urban health, public policy and comprehensive health programs. The qualities of this latter perspective should not be viewed in the short time frame of instrumental utility. Its value is rather in a more non-linear sequence through which relevant stakeholders, often in complex ways, are influenced by, and themselves influence the interpretations of, a broad body of research into a certain domain which subsequently contributes to certain policy directions.

This second perspective is frequently referred to as *enlightened* or conceptual use of evidence.

In the following, we will review such utility-driven evidence¹ from both the *problem-solving* as well as the *enlightenment* perspective.

The notion of *utility-driven evidence* is based on the observations that

- the generation of evidence serves a purpose beyond mere intellectual curiosity (McQueen & Anderson, 2001).
- in connection with public health activities, generation of evidence often takes place in complex interaction between stakeholders (De Leeuw, 1993).

Eriksson (2000), mentioned above, has endeavored to typify public health interventions, and identify relevant evaluation strategies for each (increasingly complex) intervention type. In his perspective, the amalgamation of evaluation strategies and their outcomes would lead to compelling evidence for decision-making. Tones (1997) has argued that evidence is multi-dimensional, and that measures of success are an assembly of different types of evidence, such as witness accounts, expert testimony, lab tests, etc. In short, Eriksson has established an academic. and Tones a social evidence paradigm. Neither, however, speaks out on the question as to what *purpose* either type of evidence is generated. We argue for an overarching utilitarian evidence paradigm: whether taking a social or purely scientific perspective, the producers of evidence should take into account how their products may be used in broader decision-making.

Healthy cities—social movement or WHO program?

The HCP started in 1986 as a project to seek out feasible ways to apply and implement the Ottawa Charter for Health Promotion (WHO, 1986) in urban settings (De Leeuw, 1989). Its immediate popularity among cities led to an organizational and management format that had to go beyond a small-scale demonstration project. Soon, hundreds of cities around the world became inspired to adopt the principles and 'ideology' of HCP.

'Healthy Cities' can now mean many different things (De Leeuw, 2001):

1. hundreds of European cities, assembled in national or language networks, partly inspired by and linked to the European branch of WHO;

- thousands more in other parts of the world, sometimes linked to WHO but also organized in autonomous associations. Both types of 'Healthy Cities' can be identified as parts of a social movement; and, finally,
- 3. some 50 European towns and political entities part of a network rigorously managed by WHO.

In the first part of the article, we will primarily draw on research carried out in and on the two former types and beyond, whereas in the latter part we will use information originating from the European Healthy Cities Project (E-HCP).

Documentary assessment—search strategy

In this article, we will draw on information gathered through documentary research on the topic Healthy Cities. Both gray literature (e.g. government documents, reports produced by political commissions or international organizations such as WHO) and actual research studies are included. Computerized searches have been conducted in the English-language literature. A number of electronic databases have been scrutinized. In addition, searches of the Internet have been carried out using a broad selection of search engines. The latter effort was deemed important because large amounts of the information on Healthy Cities² in general and the E-HCP specifically is to be found in non-scientific domains.

The references mentioned in this article do not represent all reports published on Healthy Cities. However, we do believe they make up the publicly available works in this area.³

³One of the authors (EdL) has been part of WHO Healthy City endeavours since their inception in 1986. From 1992 to 2002, she has been Director of the World Health Organisation Collaborating Centre for Research on Healthy Cities. In that capacity she has participated in all 'Business Meetings' of HCP and has contributed to research efforts in the first three phases of the project, specifically in the consortium (led by the London School of Economics and Political Science) that assessed the second phase, and in designing the MARI framework (Monitoring, Assessment, Reporting and Impact assessment) implemented in the third phase. She was ex officio member of the WHO Healthy Cities Evaluation Advisory Committee. The other author (TS) has been based in the European Healthy Cities office in Copenhagen to undertake a time-series analysis of data delivered annually by cities through the MARI framework.

All data and information collected during the evaluation and assessment exercises in the three phases are property of WHO. For a variety of reasons WHO can and will not relsease these into the public domain.

¹http://www.publichealth.sdu.dk/SocSciMed-article-EdLTS/Evidence-and-research-utilization.doc.

 $^{^2}http://www.publichealth.sdu.dk/SocSciMed-article-EdLTS/healthy-city-websites.doc.\\$

Enlightenment: evidence generated independent of Healthy Cities taking action

The roots of Healthy Cities are varied. Part vision of the future of health in an ever urbanizing world, part demonstration project of WHO's move towards a 'new public health' (Kickbusch, 2003) but certainly with strong roots in empirical research. This research established valid scientific foundations for the endeavor; such underpinnings provided the logic for a program of action that included an—in 1986—innovative variety of priorities such as community and intersectoral action, striving for equity in health, sustainable development and governance, the move from projectism to policy development, and a general image of health as social capital to be used for the good of (urban) society. In this case, a complex problem led to a package of solutions that is equally complex.

When looking for evidence that Healthy Cities 'works' it is important to reflect on these theoretical and empirical underpinnings, for they indicate that Healthy Cities *should* work. This body of work thus gives pointers on types of interventions and organizational requirements earlier research has identified as critical when introducing and trying to sustain a richly faceted public health initiative such as Healthy Cities. In other words; we are not just dealing with ideology shared only by true Healthy Cities 'believers'—an accusation sometimes advanced. So, if we are not yet in the position to assess unequivocally *that* Healthy Cities works, we should question what causes of such failure can be identified.

The type of programs Healthy Cities are endeavoring to implement meet health promotion effectiveness requirements outlined by two recent authoritative reviews. Smedley and Syme (2000) and IUHPE (2000a, b) explicitly found that comprehensive health promotion interventions yield more effects and more sustainable effects on a variety of indicators of health (increased positive health, proximal and distal determinants more conducive to health, improved parameters of behavioral health such as beliefs, attitudes, social norms, self-image, organizational capacity for health, and increased policymaking for health). Such comprehensive health promotion interventions mirror to no small degree the visions, objectives and requirements of Healthy Cities Projects. It is interesting that these publications provide the evidence of effectiveness of Healthy Cities postulated earlier by other authors. Duhl (1963), as one of the fathers of the Healthy Cities concept, has been arguing for such perspectives for half a century, and Kaasjager, van der Maesen, and Nijhuis (1989), Kickbusch (1989), Hancock and Duhl (1988), APEC, Asia-Pacific Economic Cooperation, APEC Industrial Science and Technology Working Group (2000) and Ashton (1991) have later dressed the skeleton of the argument with

indications of evidence from urban health endeavors and social action.

There is a range of publications that support evidence for Healthy Cities from other perspectives. In the area of urban planning and environmental health there is considerable evidence that careful consideration of health issues would create a healthier urban setting (Duhl, 1963; Aicher, 1998; Schell & Ulijaszek, 1999; Barton & Tsourou, 2000). Takano and colleagues (Takano, Nakamura, & Watanabe, 2002; Takano et al., 2002) have for instance demonstrated that access to green areas has a direct impact on senior citizens' health parameters in cities such as Tokyo and Shanghai. Recently Frank, Engelke, and Schmidt (2003) have made a convincing argument for the impact of the built environment on an important determinant of healthphysical activity. In general, the connections between the built environment and health seem to be moving deeper into the mainstream of public health research (e.g. American Journal of Public Health 2003, Vol. 93, No. 9). Noarlunga, probably the Australian town where Healthy City efforts have been best documented and assessed, achieved its successes starting from environmental health needs assessments and an infrastructure oriented Safe Community endeavor (Baum & Cooke, 1992; Baum, 1993, 2003a).

Arguing further in the realm of preconditions for urban health, Gray (1985, 1989), Gillies (1998) and Taket and White (2000) among many others have demonstrated that inter-agency work, when implemented properly, leads to better health actions and health outcomes. Capello (1999, 2000) has sustained this argument by reviewing networking activities among Healthy Cities, and finding that networking per se is an important contributor to the initiation and maintenance of health action.

'Community health' in itself is a complex field of academic attention and local action. Boutilier, Cleverly, and Labonté (2000) review the different modalities for health activities of communities. They indicate that evaluation and assessment of such activities are not just (or not in the least) the academic's task. Outcomes in community health are, therefore, hard to qualify and quantify. Baum (2003b) reviews different styles of community development and participation in health and favors Labonté's community development empowerment continuum (Labonte, 1992). Neither produces overwhelming evidence of the effectiveness of the community action perspective alone, although there is a pragmatic and opportunistic consideration that community development and participation contribute to more effective program implementation (Mazmanian & Sabatier, 1989). A review produced by the Healthy Cities program itself (WHO Regional Office for Europe (2002)) shows neither evidence. This view is consistent with a recent review by Merzel and D'Afflitti (2003).

They show that the effects from 32 community-based health promotion interventions published in American scientific journals are not as large as the theory would indicate. Their explanation of the 'failure' of these interventions to deliver hinges on three main arguments:

- Methodological and research issues: Because the preferred methodology follows the design of the Randomized Controlled Trial (RCT) or the quasiexperiment, sufficient statistical power is required to demonstrate any effect at all. Such power is lacking because of the challenges to the design of RCTs or quasi-experimental research. These require large numbers of similar (matched) communities. Anyone seriously attempting to engage in community action would recognize that this would be a virtually impossible requirement.
- Intervention-related issues: Merzel and D'Afflitti's review shows that the so-called 'comprehensiveness' of community interventions is generally flawed. Although the 'ideology' dictates multi-level interventions (combining regulatory, communicative, and facilitative interventions aimed at individuals, groups and institutions in some magical 'optimal' mix) their review uncovers serious flaws in almost all projects reviewed. Particularly policy and organization oriented interventions were missing from the mix. This flaw is founded in the third issue.
- Theoretical limitations: Historically, community interventions have their roots in behavioral approaches to empowerment, health education, and sometimes 'liberation' perspectives (Freire, 1968; Wallerstein, 1992; Minkler, 1997). However engaged community organizers are, they may lack the knowledge and capacity to draw upon insights from management science, organization studies, and political and policy research (De Leeuw, 2000). Where Merzel and D'Afflitti identify in their review of projects a complete lack of 'an integrated theory of ecological change that targeted social and policy influences through an intensive process of community mobilization' they implicitly expose the most immense challenge to public health training and action today: to involve the wealth of theory development and implementation from other disciplines for health (Gebbie, Rosenstock, & Hernandez, 2003; De Leeuw, 2003).

Merzel and D'Afflitti paint a bleak picture of the state of affairs, which is not entirely warranted. Some of the positive developments in domains neighboring public health are outlined above (such as urban planning). The challenge is further involvement and integration. One major 'Healthy City' achievement is that the movement

has ceaselessly endeavored to take action in political, organizational and behavioral realms and that it has continuously integrated requirements to that effect in its own policy statements (De Leeuw, 2001).

Nowhere have these requirements been spelt out more clearly than in the formal network making up the E-HCP. In the next sections, we will, therefore, review to what extent the E-HCP has lived up to meeting the stated requirements. Special attention is drawn to political and organizational perspectives.

Problem solving: European Healthy Cities research effort—fifteen years of evaluation

From the very beginning E-HCP sought to stimulate and enhance the long-term development of healthy public policies by local governments. The European Regional Office of WHO has defined itself as a kind of institutional broker working directly and closely with a select group of 'designated' cities (Tsouros, 2000). Nearly 50 designated cities have thus committed themselves, under the aegis of WHO, to pursue a common set of visions and objectives employing an agreed-upon set of tools, instruments and strategies. For reasons such as these, E-HCP is seen as an obvious place to look for demonstrations of the Healthy Cities approach actually having a visible and steady impact on policies or other comprehensive undertakings of relevance for the sustainable development of health at the local, urban level. The E-HCP has been running for over 15 years. Throughout there has been a formal impetus to monitor and assess whether involvement in the E-HCP has indeed materialized in distinct contributions to the ways in which health topics are dealt with locally. Although there is an absence of common methodology and standardized measures, these different assessments can, nevertheless, be placed together and hereby provide a view of the developmental patterns of the E-HCP over a longer period of time.

Research on political and organizational aspects of the E-HCP

In the following, we shall consider selected developmental trends related to two of the basic strategic perspectives of the healthy city approach that persistently have been underlined in the sets of WHO guidelines for the E-HCP network from 1987 and onwards (e.g. WHO Regional Office for Europe, 1997). They are

 Securing political commitment to the principles and direction of the E-HCP Promoting institutional alterations with the intention to install new organizational structures to manage change (e.g. via partnerships for health and intersectoral collaboration)

The assessment of progress in relation to these core elements will center on the individual city-level and especially focus on local political and organizational performances.

These foci have been identified by the WHO leadership of the E-HCP as essential for securing political support and process-oriented progress toward health of cities (Tsouros & Draper, 1993). Moreover, they are in keeping with most Healthy Cities projects where the emphasis is not so much on impact assessment at the addressee level but more on advocating and building support for policy change that, in the long run, can promote the installment of systematic judgment of how local structural conditions and community relations influence health (Baum, 2003b).

Political perspectives of the E-HCP: building support and generating policy formation

It has been possible for cities to secure stable and continued political support to the principles of the E- HCP. Moreover, in most cases Healthy Cities have moved one step further and provide visible commitment among city leaders to meet one or more of the specific targets and requirements guiding and giving thrust to the strategic perspectives of E-HCP phase's I (1987–1992), II (1993–1997) and III (1998–2002) (WHO, 2004). Persistent targets throughout the existence of E-HCP have been the obligation of cities to produce comprehensive strategic plans on health and urban development; to implement a systematic health monitoring system assessing the health, environmental and social impacts of policies within cities; to establish mechanisms for public participation in debates and decision-making processes relevant to health and thereby contribute to the empowerment of local people. As the E-HCP is a social movement, these targets have evolved, been refined, and adapted to new insights over time and to the (political) needs identified in each of the Phases (Tsouros, 1990; Blue & Harpham, 2000).

In their review of HCP Phase-I Draper, Curtice, Hopper, & Goumans (1993) come to the inference that it has been possible to build momentum and a solid political basis for Healthy Cities action at the local level. Draper et al. support this interpretation by referring to (1) pronouncements put forward by political leaders, (2) formal commitments to the E-HCP principles (e.g. the 1990 *Milan Declaration on Healthy Cities*) adopted by senior politicians and (3) strategic decisions on lines of

action taking by city councils or other formally constituted units with bearing on the Healthy Cities approach.

Notwithstanding the sympathetic angle presented by Draper et al. it is equally fair to see the trends on political support and commitment in a more critical light. Goumans and Springett (1997) point out that the seemingly marked political support for Healthy Cities among urban leaders more often than not is of a symbolic nature only and does not include tangible attempts to integrate the core principles of the E-HCP into the general structure of city administration. This assertion finds empirical support in other findings that cities participating in formal Healthy Cities Networks actually develop and make adjustments without reference to WHO's overarching ideals and strategies concerning health (Boonekamp, Colomer, Tomás, & Nunez, 1999).

Taken together, both the sympathetic and critical viewpoint hint at the old dictum: "Things Take Time". In this case, "Things" is a long-term policy project aiming to make it possible for people to live fulfilling lives via manipulating the whole range of determinants of health in particular urban settings. This is, indeed, a very ambitious objective. Consequently, trying to establish the degree to which results attained accord with this general ambition is a huge challenge. To this the effort may be added to investigate whether the actual outputs of particular Healthy Cities might specifically be attributed to the adoption of principles installed in the E-HCP network. Not much is known on matters such as these.

Our research (De Leeuw, Abbema, & Commers, 1998) indicates that cogent political commitment, relevant for ensuring the health status and stated health targets of a given urban population and environment, is something that most cities have before entering the HCP not something they get along the way.

Elsewhere, in a discussion on policy ontologies in Healthy Cities (Milewa & de Leeuw, 1995), we have found that such ontologies (sets of causal and final relations upon which policy decisions are based) may not change due to the participation of a city in the project.

It is not without reason to interpret these findings as indications that political considerations *lead to* participation in the Healthy Cities Project, whereas participation in the Project does *not lead to* shifts in political considerations and subsequent policy-making. If an assumption, such as the one hinted at above, were found to be true, it would not be favorable to a program which is about "changing the ways in which cities think about, understand and make decisions about health" (Sharp, 2002). Presently there is no evidence to confirm or deny the mentioned conjecture within the context of the E-HCP.

Organizational perspectives of the E-HCP: partnerships and intersectoral collaboration

Many of the organizational features of the E-HCP are based on the establishment of what is often called partnerships for health, which generically speaking means any agreement between two or more parties to take measures promoting health (WHO, 1998).

From the early days of the E-HCP it has been stated as a joint obligation to move from more or less casual partnerships, deemed as highly precarious and, therefore, not very useful in connection with the long-term effort to "make health everybody's business", to formal relationships between part or parts of different sectors capable of taking action on issues deemed as important for urban health and development. The most common appellation for these formal relationships has been intersectoral collaboration in which actors belonging to different sectors unite to address health-related issues (O'Neill, Lemieux, Groleau, Fortin, & Lamarche, 1997; WHO, 1998; Strobl & Bruce, 2000). In fact, mobilizing intersectoral action is highlighted as an indispensable element in developing any Healthy Cities Project (WHO Regional Office for Europe, 1997). The most frequent way to promote intersectoral action has been for cities to establish a widely representative intersectoral steering committee with strong links to the political decisionmaking system, to act as a focus for the project and oversee the work done. The presumed effectiveness of these committees in providing leadership and policy directions within a number of E-HCP cities led to making the establishment of them a requirement for urban areas participating in the E-HCP from the early 1990s and onwards (Kenzer, 2000).

However, putting together a steering group to promote intersectoral action is one thing. Making such a group work and assuring that their key decisions and formulated viewpoints have real impact on healthrelated topics in the city at large is quite another.

When commenting on the efforts towards intersectoral collaboration a number of cities involved in the E-HCP have over the years stated that the implementation of this ideal claim is very hard indeed because it challenges traditional patterns of (public) organizations and management (Tsouros & Draper, 1993). Various sectors—both within and outside the framework of municipal authorities—watch over their specific interests and fields of responsibility.

To be sure, power- and bargaining games between pressure groups are an inevitable part of everyday life in a political organization (De Leeuw, 1999). On that background the positive result cities do ascribe to the introduction of intersectoral collaboration should be deemed as very important. These positive results concern strengthened capacities in cities to address new health-related areas based on the presence of

increased political and community support, increased visibility, competent staff and committee members, the promotion and facilitation of new thoughts and ideas on where and how health is created and wider support for healthy cities approaches in general (Goumans, 1998; Baum, 2003a, b). Benefits like these are frequently mentioned by cities taking part in the E-HCP (cf. city profiles at WHO, 2004). Still, it is notable that even though the promotion of intersectoral policies and organizational infrastructures for health development has been standard procedure in many countries and settings since the early 1980s, 20 years down the road it is acknowledged that implementing these intersectoral policies has proved more difficult than anticipated. Lasting cross-sector partnerships for health are still not generally in place (Ritsatakis et al., 2000; Mackenbach & Bakker, 2002). In many cases multi-sectoral collaborations take the form of joint projects and actions only. Measures to install long-term, formal co-operations with the ultimate aim of developing innovative policies with lasting impact on the ways in which municipal authorities deal with, and prioritize, healthrelated issues are few in number (Goumans, 1998). Furthermore, as far as the E-HCP is considered, the evidence of an added value of pursuing the intersectoral approach within certain healthy cities projects is rather inconclusive (Springett, 1997; Oduney, 2001). Some scholars have suggested pulling back from the rigid demand embedded in the E-HCP requirements for the establishment of formal institutional frameworks in connection with intersectoral collaboration and instead put energy into actually sorting out processes through which people can work together effectively in ways that they themselves find sensible and rewarding (Costongs & Springett, 1997).

Interestingly the ability to install intersectoral approaches may be more pronounced in regions, which at present do not have formalized networks similar to the E-HCP. Recent findings suggest that various intersectoral methods have been conducive to local Healthy Cities Projects in developing countries. It is, however, important to note that in these cases working intersectoral is understood as any recognized activity between parts of the community in question. Whether this intersectoral collaboration is ad hoc or permanent, formal or informal is not an issue (Harpham, Burton, & Blue, 2001). In contrast the cities taking part in the E-HCP have for over a decade committed themselves to promote formal, continued, broad-based multi-sectoral co-operations involving high-level political decisionmakers from city council or the equivalent.

Starting from this last observation, on the degree of formalized means of cooperation in cities taking part in the E-HCP versus other urban communities designated as Healthy Cities, a general remark should be made that we must remember to compare like with like. In this

particular case it means that we should not make the mistake to caricature the E-HCP network as a stiffened entity and in contrast to this depict other independent Healthy Cities as vibrant and innovative as regards new public health initiatives.

Overall the bar is already at a high level in the cities taking part in the E-HCP. That is to say, at least at a formal level these urban dwellings all have demonstrated qualities such as; sustained political support to the principles of new public health; the establishment of organizational structures to manage change; and solid commitment to develop a common and inclusive vision for the city concerning health. The amount of progress that such cities undergo, at least in a short to intermediate period of time, may seem to be marginal—but important all the same.

Discussion

It is our overall claim that there is fair evidence that Healthy Cities works. However, we have to qualify this statement. There are problems with (1) the communication of evidence, (2) the tension between the original intent of the Healthy Cities Project and its current operations, and (3) the complex nature of Healthy Cities and the methodological toolbox currently available.

Firstly: We have suggested the development of 'utility-driven evidence': evidence that serves a purpose. When contrasting the materials presented under the enlightenment model of knowledge utilization with those that are drawn from the problem-solving perspective it is clear that the E-HCP and its international and local operators require not just 'a general body of knowledge that Healthy Cities work', but specific elements of evidence that given actions or phenomena work under certain conditions. This presents Healthy Cities operators with these challenges: (a) communicate the nature of evidence that is to be pursued; (b) ceaselessly put in place mechanisms to generate those expressions of evidence; and (c) legitimize and validate the range of methodologies and sources that can contribute to such utility-driven evidence. In the report of an expert panel for Research on Healthy Cities (De Leeuw, O'Neill, Goumans, & de Bruijn, 1993) these challenges have been united under the banner of 'vulgarization of research'.

Secondly, the specific account concerning the E-HCP substantiates the assumption that there exists a considerable divide between the original intent of the WHO led initiative on Healthy Cities and the current drive towards evidence. The E-HCP was created to experiment with new approaches to health promotion in cities and to demonstrate how they work in practice. However, the immediate success of the E-HCP made it impossible to preserve it as a "social experimentation"

program" solely aimed at acquiring, over time, definitive knowledge on particular impacts of public interventions in an urban setting. In rapid succession, cities were included in the network and many more were getting ready to join. In hindsight, the paradoxical fact presents itself that the prompt success of the visions supporting the E-HCP was the very thing that more than anything else ruled out the chance of gathering substantial evidence on the exact added value of the different elements included in the Healthy Cities approach when dealing with urban health and development. There was no way of arranging a small-scale trial run of the health promoting strategies embedded in the original E-HCP framework before enacting them across the board. As a figure of speech the core values backing the Healthy Cities concept, as we have described them above, struck the health promoting and disease preventing Zeitgeist perfectly. Understandably energy was primarily put into capitalizing on this momentum by further developing and consolidating the E-HCP network and not so much into performing rigid experimental research on specific health targets or determinants acknowledged in the scientific community as being of special relevance in an urban environment. As Awofeso (2003) neatly puts it: "...the Healthy Cities ethos has been characterized more by action than by reflection".

Thirdly, the nature of the 'problem' that Healthy Cities has the ambition to address is not easily framed in theoretical and methodological terms. The production of definitive evidence thus remains to be a challenge at a time when the scientific state of the art is, in a way, catching up with the ambitions of Healthy Cities. Smedley and Syme (2000), Mackenbach and Bakker (2002), Berkman and Kawachi (2000), Marmot and Wilkinson (1999), Wilkinson (1996) and Evans, Barer, and Marmor (1994), to name just a few of the books describing this 'problem', see complex, interconnected and often reciprocal relations between such factors as social capital, community coherence, policy-making, social systems, marginalization, the 'Robin Hood index', the immune system, social networks, poverty, education, physical and economic infrastructure, and health. Although Healthy Cities by any indication from these works seems to be on the right track, it must be conceded that the definitive substantiation of these indications is not immediately forthcoming.

The review by Merzel and D'Affllitti (2003) mentioned above is a point in case. The authors cannot find evidence that community health interventions are effective. However, criteria for inclusion of studies in their meta-analysis specify that these studies must adhere to the methodological 'experiment-control study' design. Perhaps such designs *qualitate qua* are incapable of producing evidence of effectiveness, precisely because of the fact that the complexity and uniqueness of the phenomena under study do not lend themselves to an

application of that methodology (Dobrow, Goel, & Upshur, 2004). The challenge, we feel, is in the establishment of coherent theoretical frameworks that would lead to a methodological toolbox suited to deal with the complex, interconnected and reciprocal problems that Healthy Cities present us with.

The establishment of the theoretical or conceptual frameworks should lead to the implementation of TBE, as discussed above (Birckmayer & Weiss, 2000). Proper application of TBE requires validated operationalizations of theory into appropriate methodologies. These in turn, we repeat, explain not only *that* things work, but also *how*. These answers constitute relevant utility-driven evidence for Healthy Cities operators.

Conclusion: moving forward

From our compilation of findings in an *enlightenment* perspective on utility-driven evidence for Healthy Cities it appeared that there is a convincing body of knowledge to indicate that 'Healthy Cities' works. From the *problem-solving* perspective on E-HCP, though, we have not been able to establish unequivocal proof that would contribute to informed decision-making in urban health.

Two challenges lie ahead for comprehensive and complex public health interventions to deliver.

First, those who argue for more, or more decisive, evidence in this domain would have to clarify the utilities for which such an evidence is to be pursued. The bargaining and negotiation game that policy-making is extends, and very much so in the Healthy Cities realm, to a multitude of actors and stakeholders beyond the academic community and decision-making circles. As long as there is no agreement in this arena on the nature of evidence, it would be hard to produce convincing clarity on its deliverables. We would argue that the nature of 'Healthy Cities'—a realm to test innovations in public health—constitutes an appropriate arena to address this challenge. WHO, the self-declared institutional broker in the field, can and should be instrumental in facing this challenge.

Second, utility-driven evidence and theory-based evaluations constitute solid conceptual foundations for the pursuit of further coherence within a diversity of theoretical and methodological approaches to the assessment of complex public health interventions. Consistent logical frameworks that address proximal and distal determinants and interventions for health should be further developed and applied. Given the almost two decades that Healthy Cities have been around, it is astonishing to find that the combined literature on the subject only presents a rough framework from which operational concepts, presumed final and causal relationships and common features are to be extracted. Building on intervention typologies and

planned approaches to the development of health interventions it is high time for *academia* to deliver.

References

- Aicher, J. (1998). Designing Healthy Cities—prescriptions, principles, and practice. Malabar, Fla.: Krieger Publishing Co.
- APEC, Asia-Pacific Economic Cooperation, APEC Industrial Science and Technology Working Group. (2000). *Healthy futures for APEC megacities. Vol. 1. Summary report of a foresight project.* Bangkok: The APEC Center for Technology Foresight, National Science and Technology Development Agency.
- Ashton, J. (1991). Healthy Cities. Milton Keynes: Open University Press.
- Awofeso, N. (2003). The Healthy Cities approach—reflections on a framework for improving global health. *Bulletin of the World Health Organization*, 81(3), 222–223.
- Banta, H. D. (2004). Considerations in defining evidence for public health. The European Advisory Committee for health research. *International Journal of Technology Assess*ment in Health Care, 19(3), 559–572.
- Barton, H., & Tsourou, C. (2000). Healthy urban planning. London: SPON Press.
- Baum, F. (1993). Healthy Cities and change: Social movement or bureaucratic tool? *Health Promotion International*, 8(1), 31–40.
- Baum, F. (2003a). Cities, suburbs, and communities: How might they change to support the environment and human health. In F. Baum (Ed.), *The new public health*, (2nd ed) (pp. 342–379). South Melbourne: Oxford University Press.
- Baum, F. (2003b). Healthy Cities, local agenda 21, and healthy settings. In F. Baum (Ed.), *The new public health*, (2nd ed) (pp. 474–508). South Melbourne: Oxford University Press.
- Baum, F., & Cooke, R. (1992). The evaluation of the Healthy Cities Noarlunga Project. *Health Promotion International*, 7(3), 181–193.
- Berkman, L., & Kawachi, I. (2000). *Social epidemiology*. Oxford: Oxford University Press.
- Birckmayer, J. D., & Weiss, C. H. (2000). Theory-based evaluation in practice. What do we learn? *Evaluation Review*, 24(4), 407–431.
- Blue, I., & Harpham, T. (2000). Evaluation products—overview of phase II evaluation. Copenhagen: WHO/EURO.
- Boonekamp, G. M. M., Colomer, C., Tomás, A., & Nunez, A. (1999). Healthy Cities evaluation: The co-ordinators perspective. *Health Promotion International*, 14(2), 103–110.
- Boutilier, M., Cleverly, S., & Labonté, R. (2000). Community as a setting for health promotion. In B. Poland, I. Rootman, & L. Green (Eds.), *Settings for health promotion* (pp. 250–278). Beverly Hills: Sage.
- Capello, R. (1999). Il Paradigma delle Reti di Città: Una Misura delle Esternalità di Rete Urbane. Economia Pubblica, 6, 41–68.
- Capello, R. (2000). The city-network paradigm: Measuring urban network externalities. *Urban Studies*, *37*(11), 1925–1945.
- Cohen, M. N. (1989). Health and the rise of civilization. New Haven: Yale University Press.

- Costongs, C., & Springett, J. (1997). Joint working and the production of a city health plan: The Liverpool experience. *Health promotion International*, 12(1), 9–19.
- Dobrow, M. J., Goel, V., & Upshur, R. E. G. (2004). Evidence-based health policy: Context and utilization. *Social Science & Medicine*, 58(1), 207–217.
- Draper, R., Curtice, L., Hopper, L., & Goumans, M. (1993).
 The five year review of the WHO Healthy Cities Project 1987–1992. WHO-EURO, Copenhagen.
- Duhl, L. (Ed.). (1963). The urban condition: People and policy in the metropolis. New York: Simon & Schuster.
- Eriksson, C. (2000). Learning and knowledge-production for public health: a review of approaches to evidence-based public health. Scandinavian Journal of Public Health, 28, 298–308.
- Evans, R. G., Barer, M. L., & Marmor, T. R. (Eds.). (1994). Why are some people health and others not? The determinants of health in populations. New York: Aldine De Gruyter.
- Frank, L. D., Engelke, P. O., & Schmidt, T. L. (2003). Health and community design—the impact of the built environment on physical activity. London: Island Press.
- Freire, P. (1968). *Pedagogy of the oppressed*. New York: Seabury.
- Gebbie, K., Rosenstock, L., & Hernandez, L. M. (Eds.). (2003).
 Who will keep the public healthy? Educating public health professionals for the 21st Century. Washington, DC: National Academies Press.
- Gillies, P. (1998). Effectiveness of alliances and partnerships for health promotion. *Health Promotion International*, 13(2), 99–120.
- Goumans, M. (1998). Innovations in a fuzzy domain. Healthy Cities and (health) policy development in the Netherlands and the United Kingdom. Maastricht: University of Maastricht.
- Goumans, M., & Springett, J. (1997). From projects to policy: 'Healthy Cities' as a mechanism for policy change for health? *Health Promotion International*, 12(4), 311–322.
- Gray, B. (1985). Conditions facilitating inter-organisational collaboration. *Human Relations*, 38(10), 911–936.
- Gray, B. (1989). Collaborating, finding common ground for multiparty problems. San Francisco/London: Jossey-Bass Publishers.
- Hancock, T., & Duhl, L. (1988). Promoting health in the urban context. WHO healthy cities papers No. 1. Copenhagen: FADL Publishers.
- Harpham, T., Burton, S., & Blue, I. (2001). Healthy city projects in developing countries: The first evaluation. *Health Promotion International*, 16(2), 111–125.
- IUHPE, International Union for Health Promotion and Education. (2000a). The evidence of health promotion effectiveness. Shaping public health in a New Europe. Part one: Core document. Brussels: ECSC-EC-EAEC.
- IUHPE, International Union for Health Promotion and Education. (2000b). The evidence of health promotion effectiveness. Shaping public health in a New Europe. Part two: Evidence book. Brussels: ECSC-EC-EAEC.
- Kaasjager, D. C., van der Maesen, L. J. G., & Nijhuis, H. G. J. (Eds.). (1989). The new public health in an urban context. Paradoxes and solutions. WHO Healthy Cities Papers No. 4. Copenhagen: FADL Publishers.
- Kenzer, M. (2000). Healthy Cities: A guide to the literature. *Public health Reports*, 115(2/3), 279–289.

- Kickbusch, I. (1989). Good planets are hard to find. WHO Healthy cities papers No. 5. Copenhagen: FADL Publishers.
- Kickbusch, I. (2003). The contribution of the world health organization to a new public health and health promotion. American Journal of Public Health, 93(3), 383–389.
- Labonte, R. (1992). Heart health inequalities in Canada. Models, theory and planning. *Health Promotion International*, 7(2), 119–127.
- De Leeuw, E. (1989). The sane revolution—health promotion: Backgrounds, scope, prospects. Assen/Maastricht: Van Gorcum.
- De Leeuw, E. (1993). Health policy, epidemiology and power: The interest web. *Health Promotion International*, 8(1), 49–52.
- De Leeuw, E. (1999). Healthy Cities: Urban social entrepreneurship for health. *Health Promotion International*, 14(3), 261–269.
- De Leeuw, E. (2000). Beyond community action: communication arrangements and policy networks. Commentary. In B. D. Poland, L. W. Green, & I. Rootman (Eds.), Settings for health promotion. Linking theory & practice (pp. 287–300). Thousand Oaks: Sage.
- De Leeuw, E. (2001). Global and local (glocal) health: The WHO Healthy Cities programme. *Global Change and Human Health*, 2(1), 34–53.
- De Leeuw, E. (2003). The role of schools of public health in health policy development. In Proceedings, XXIV ASPHER Annual Conference, Real World Engagement: Schools of Public Health and Challenges of Public Health. September 28—October 1, 2002. (pp 31–36). Zagreb: Andrija Stampar School of Public Health.
- De Leeuw, E., Abbema, E., & Commers, M. (1998) Healthy cities policy evaluation—final report. WHO Collaborating Centre for Research on Healthy Cities, Maastricht/EU DG V, Luxembourg.
- De Leeuw, E., O'Neill M., Goumans, M. & de Bruijn F. (Eds.). (1993). Healthy Cities research agenda. In Proceedings of an expert panel. RHC monographs no. 2. WHO Collaborating Centre for Research on Healthy Cities, Maastricht.
- Mackenbach, J., & Bakker, M. (Eds.). (2002). Reducing Inequalities in health: A European perspective. London & New York: Routledge.
- Marmot, M., & Wilkinson, R. (1999). Social determinants of health. Oxford: Oxford University Press.
- Mazmanian, D. A., & Sabatier, P. A. (1989). Implementation and public policy. Lanham, MD: University Press of America.
- McQueen, D. V., & Anderson, L. M. (2001). What counts as evidence: issues and debates. In I. Rootman, M. Goodstadt,
 B. Hyndman, D. V. McQueen, L. Potvin, J. Springett, & E. Ziglio (Eds.), Evaluation in health promotion. Principles and perspectives (pp. 63–82). Copenhagen: WHO Regional Publications European Series, No. 92.
- Merzel, C., & D'Afflitti, J. (2003). Reconsidering communitybased health promotion: Promise, performance, and potential. American Journal of Public Health, 93(4), 557–574.
- Milewa, T., & de Leeuw, E. (1995). Reason and protest in the new urban public health movement: An observation on the sociological analysis of political discourse in the 'healthy city'. *British Journal of Sociology*, 47(4), 657–670.

- Minkler, M. (Ed.). (1997). Community organizing and community building for health. London: Rutgers University Press.
- Oduney, F. (2001). Has research been carried out to demonstrate the added value of the Healthy Cities project? A systematic review. Copenhagen: WHO Regional Office for Europe.
- O'Neill, M., Lemieux, V., Groleau, G., Fortin, J. P., & Lamarche, P. A. (1997). Coalition theory as a framework for understanding and implementing intersectoral health-related interventions. *Health Promotion International*, 12(1), 79–87.
- Ritsatakis, A., Barnes, R., Dekker, E., Harrington, P., Kokko, S., & Makara, P. (Eds.). (2000). Exploring health policy development in Europe. WHO Regional Publications, European Series, No. 86. Finland: WHO Regional Office for Europe.
- Sharp, D. (2002). Improving city health: How can we tell? Journal of Urban Health: Bulletin of the New York Academy of Science, 79(4), 438–439.
- Schell, L. M., & Ulijaszek, S. J. (Eds.). (1999). Urbanism, health and human biology in industrialised countries. Society for the study of human biology symposium 39. Cambridge: Cambridge University Press.
- Smedley, B. D., & Syme, S. L. (2000). Promoting health. Intervention strategies from social and behavioral research. Committee on capitalizing on social science and behavioral research to improve the public's health. Washington DC: Division of Health Promotion and Disease Prevention, Institute of Medicine.
- Springett, J. (1997). Intersectoral collaboration theory and practice: Lessons for WHO Healthy Cities project. Occasional paper series. Liverpool: John Moores University.
- Strobl, J., & Bruce, N. (2000). Achieving wider participation in strategic health planning: Experiences from the consultation phase of Liverpool's City health plan. *Health Promotion International*, 15(3), 215–225.
- Takano, T., Nakamura, K., & Watanabe, M. (2002). Urban residential environments and senior citizens' longevity in megacity areas: The importance of walkable green spaces. *Journal of Epidemiology and Community Health*, 56(12), 913–918.

- Takano, T., Nakamura, J., Fu, K., Fukuda, K., Uji, Y., Watanabe, M., & Nakajima, H. (2002). Ageadjusted mortality and its association to variations in urban conditions in Shanghai. *Health Policy*, 61(3), 239–253.
- Taket, A., & White, L. (2000). Partnership and participation. Decision-making in the multi-agency setting. New York: Wiley.
- Tones, K. (1997). Beyond the randomized controlled trial: a case for "judicial review". Health Education Research, 12(2), 1–4
- Tsouros, A. (Ed.). (1990). World health organization Healthy Cities project—a project becomes a movement: Review of progress 1987–1990. Copenhagen: FADL Publishers.
- Tsouros, A. (2000). Why urban health cannot be ignored: The way forward. *Reviews on Environmental Health*, 15(1-2), 267-271.
- Tsouros, A., & Draper, R. A. (1993). The Healthy Cities project: New developments and research needs. In J. K. Davies, & M. P. Kelly (Eds.), *Healthy Cities—research and practice* (pp. 25–33). New York: Routledge.
- Wallerstein, N. (1992). Powerlessness, empowerment and health: Implications for health promotion programs. American Journal of Health Promotion, 6(3), 197–205.
- WHO. (1986). Ottawa charter for health promotion. Geneva: WHO.
- WHO. (1998). Health promotion glossary. Geneva: WHO.
- WHO Regional Office for Europe. (1997). Twenty steps for developing a Healthy Cities project (3rd ed). Copenhagen: WHO Regional Office for Europe.
- WHO Regional Office for Europe. (2002). Community participation in local health and sustainable development. Approaches and techniques. University of Central Lancashire, European Sustainable Cities & Towns Campaign, European Commission, Healthy Cities Network. Copenhagen: WHO Regional Office for Europe.
- WHO (2004) http://www.who.dk/healthy-cities/Links/20010907.
 Wilkinson, R. G. (1996). Unhealthy societies: THE afflictions of inequality. London: Routledge.