Global and local *(glocal)* health: the WHO healthy cities programme

Urban health is likely to be one of the momentous challenges of the twenty-first century. Ever increasing numbers of people move to urban environments; the failure to adequately link urban planning to public health is described in this paper, and the WHO Healthy Cities Programme initiated in 1986 is presented as a vehicle to redress that problem. This article describes the foundations, scope and purpose of the Healthy Cities Programme with currently more than four thousand participating towns, communities and cities. Healthy Cities are put in a context of other global agency's agendas. Evaluation efforts in Healthy Cities are described for which a proper inquiry perspective is provided. The Healthy City notion is defined and operationalised and an overview is given of various evaluation enterprises. The paper is concluded with a description of the MARI Framework (Monitoring, Accountability, Reporting and Impact Assessment) currently operational in the European Region of WHO.

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Urbanization and health

Never before the people of our planet have moved to live in cities at the rate we are witnessing in the early years of the third millennium. Half the world's population is already urbanized, and estimates are that at least 60% of the world population will live in large conurbations by 2030. More people are going to live in cities, even more will live in *mega-cities*. Taking the size of a mega-city to be at least ten million population, nearly three hundred million people will be living in twenty such cities by the year 2015 (APEC, 2000; table 1).

Though the relationship between urbanisation and health seems apparent, no unequivocal empirically validated theories are explaining causal or final correlates between 'urbanisation' and 'health'. In 'focussed' fields (e.g. environmental health, infectious disease public health, and increasingly lifestyle-related behavioural health) there is a considerable body of knowledge, but theories covering the complex relationship between the concepts that both at best can be defined as 'fuzzy' are yet only in the early stages of development. In a related field, Clark (1999) concluded a review of the literature with the statement that '*The challenge for analysts is to develop a comprehensive understanding of urban development and change so as to enable governments to act to secure a sustainable urban future.*' Naturally, health and sustainability have long been regarded as two sides of the same coin, and we are thus to create fuller understanding of the relationship between urban development, (social) change, and health as well, and its consequences for policy and intervention development.

Two works that should be considered attempts to do exactly that are noted here. Aicher (1998) has pulled together what he calls the 'stressors' and 'supporters' of health in designing health-enhancing (or 'healthy') cities. He thus compiled an impressive list of hundreds of determinants of urban health which urban developers have to take into account (categorised into physical, biochemical, socio-economic, and psychological stressors and supporters, combined with economic considerations in urban health planning). He is also one of very

Table 1 The World's biggest cities, 1999 and 2015 estimates in millions. City sizes on basis of urban agglomeration, not administrative boundaries (APEC, 2000)

City; country	Population 1999	% increase expected	City; country	Predicted population 2015
Tokyo, Japan	26.3	2.6	Tokyo, Japan	26.4
Mexico City, Mexico	17.9	15.8	Mumbai, India	26.1
Mumbai, India	17.5	72.7	Lagos, Nigeria	23.2
Sao Paolo, Brazil	17.5	23.4	Dhaka, Bangla Desh	21.2
New York, USA	16.5	6.7	Sao olo, Brazil	20.4
Los Angeles, USA	13	13.5	Mexico City, Mexico	19.2
Shanghai, China	12.9	11.2	Karachi, Pakistan	19.2
Lagos, Nigeria	12.8	125.3	New York, USA	17.4
Calcutta, India	12.7	12.7	Jakarta, Indonesia	17.3
Buenos Aires, Argentina	12.4	18.6	Calcutta, India	17.3
Dhaka, Bangla Desh	11.7	124.3	Delhi, India	16.8
Karachi, Pakistan	11.4	97.4	Metro Manila, Philippines	14.8
Delhi, India	11.3	69	Shanghai, China	14.6
Osaka, Japan	11	- 0.3	Los Angeles, USA	14.1
Beijing, China	10.8	35.2	Buenos Aires, Argentina	14.1
Jakarta, Indonesia	10.6	88.4	Cairo, Egypt	13.8
Metro Manila, Philippines	10.6	59.4	Istanbul, Turkey	12.5
Rio de Janeiro, Brazil	10.5	16.9	Beijing, China	12.3
Cairo, Egypt	10.3	44.3	Rio de Janeiro, Brazil	11.9
Seoul, South Korea	9.9	3.2	Osaka, Japan	11

few authors that stresses the aesthetic component of urban life. An overarching notion for 'healthy urban planning', however, does not emerge from his work. Schell & Ulijaszek (1999) have compiled a body of knowledge on urban health that stretches over seven thousand years and from infectious disease, poverty, chronic disease to nutrition issues in city contexts. The contributors to their book largely single out *disease* patterns in the urban context and as a consequence seem to favour singular interventions rather than packages of integrated approaches. The *poverty and urban health* section in this book (Dowler, 1999, Johnston & Gordon-Larsen, 1999, Czerwinski, 1999) deals mainly with pattern description rather than with a review of successful intervention studies (if any) to combat the enormous burden of urban poverty on public health. Barton and Tsourou (2000) attempt to apply an urban planner's perspective to the complex interrelations between health, its determinants, and urban living. The synonyms for urban planning as compiled by the European Commission (1994) they agree upon using for their book, however already describe the schism between the urban planning profession and the public health community: *spatial planning, land-use planning, town and country planning, physical planning, territorial planning* and *space management systems*. None of those terms would be familiar to public health professionals, nor would probably the notion of *'determinants of health'* have a profound meaning in the urban planning commons.

Connecting public health to urban studies and urban planning seems therefore an urgent task. Two approaches to that task are presented here. Based on the extended metabolism model of human settlements by Newman and Kenworthy (1999) used by APEC in its *'Healthy Futures for APEC Megacities'* project a conceptual framework as presented in figure 1 has been developed. The figure describes the various components necessary for urban health; arrows between components would indicate the areas of possible intervention.

These elements of the framework are concordant with the recent policies proposed by the United Nations Centre for Human Settlements UNCHS (Habitat) in its good urban governance framework (UNCHS, 2000). In its '*Inclusive City*' Declaration UNCHS sets forth the norms for governance:

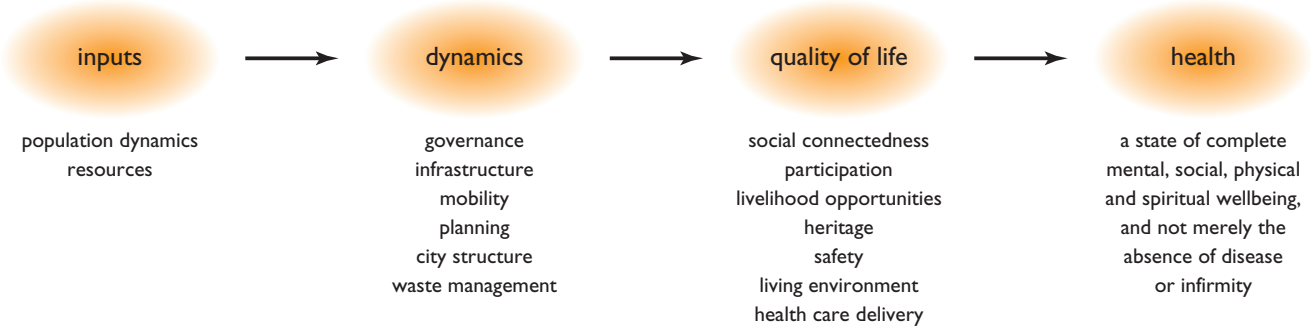

Figure 1

"Urban governance is the sum of the many ways individuals and institutions, public and private, plan and manage the common affairs of the city. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens;

Urban governance is inextricably linked to the welfare of the citizenry. Good urban governance must enable women and men to access the benefits of urban citizenship. Good urban governance, based on the principle of urban citizenship, affirms that no man, woman or child can be denied access to the necessities of urban life, including adequate shelter, security of tenure, safe water, sanitation, a clean environment, health, education and nutrition, employment and public safety and mobility. Through good urban governance, citizens are provided with the platform which will allow them to use their talents to the full to improve their social and economic conditions."

(UNCHS, 200, p. 5)

It is remarkable to confront the objective of the *'Inclusive City'* as '*citizens allowed to use their talents to the full to improve their social and economic conditions'* with the central tenet of the policy programme of the World Health Organisation originally launched as *Health for All by the Year 2000*, and recently re-endorsed as *Health 21*: '*The main social target of governments and World Health Organisation should be the attainment by all citizens of the world of a level of health that will permit them to lead a socially and economically productive life'* (World Health Assembly, 1977). Possibly such a phrasing of objectives is clouded by *'UN-speak'*, i.e. a type of jargon prevalent in circles of the United Nations and its technical agencies, but one thing is clear: urban governance as well as global public health aim at the improvement of the human condition. Yet, whereas health is considered by UNCHS as only one of the contributing factors to that objective, WHO regards health as the prime condition, determined by a range of other factors, for an economically and socially productive humanity. The current WHO policies for Healthy Cities join those positions.

WHO policy

The acceptance by European member states of the World Health Organization in 1981 of 38 targets for *Health for All* marked a shift in European health policy development. One of the action programmes that subsequently developed aimed at the establishment of an innovative health promotion perspective, stepping away from only behaviour change for health towards more structural and policy-oriented approaches for the promotion of health. The innovation first culminated in *The Ottawa Charter for Health Promotion* (WHO & Health Canada, 1986, De Leeuw, 1989a) and eventually led to the *Jakarta Declaration on Health Promotion* (WHO, 1997).

The WHO perspective on health promotion has its foundation in the recognition of the fact that the creation of health is a multi-causal phenomenon for which, among other things, intersectoral collaboration, community action and political support are required (WHO Healthy Cities Project, 1988a).

Both the *Charter* and the *Declaration* consist of visionary statements regarding the development of health promotion. To the World Health Organization, and the participants in its *International Health Promotion Conferences*, the promotion of health goes beyond mere behaviour modification. Following the logo of the first conference (where the *Ottawa Charter* was accepted) in figure 2 health promotion should start with enabling, mediating and advocating strategies towards an overall, integrative and intersectoral health perspective. Action areas would include the reorientation of health services to include health promotion, the creation of supportive physical and social environments for health, and finds

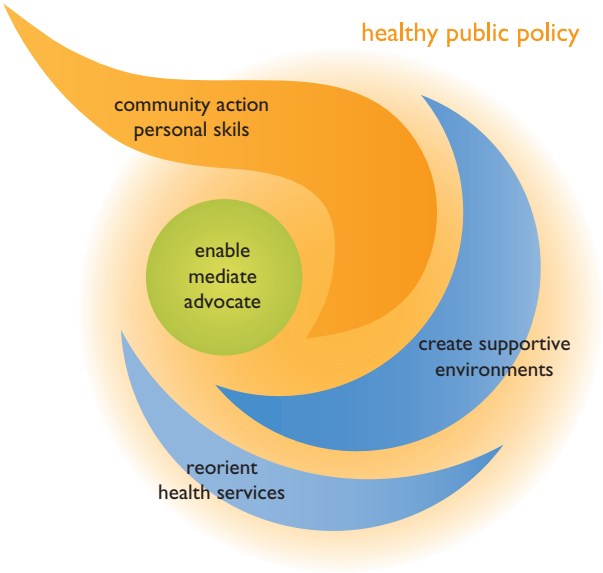

Figure 2

its foundation in community action and personal skills for health. The development of healthy public policy (policies taking into account health consequences of programmes in each public sector, De Leeuw, 1989b) is an inextricable part of health promotion endeavours.

In order to demonstrate that such visionary statements could be implemented in real-life situations, the WHO Regional Office for Europe decided to initiate an urban health promotion programme in 1986 (Hancock & Duhl, 1988, Kaasjager, Van der Maesen & Nijhuis, 1989, WHO Healthy Cities Project, 1988a, 1988b). The Toronto Healthy City programme already operational since the early 1980s inspired the WHO choice for urban contexts. This was based on a seminal work edited by Duhl (1963). Duhl and his colleagues compared the urban environment to a living organism which could be healthy in itself, and therefore healthful for its citizens.

WHO had hoped that a handful of European cities would want to volunteer in its pilot urban health promotion programme, embarking on an adventure of innovation in health development. No-one could really predict or guarantee the outcomes of that process. Much to WHO's surprise, more than a handful of cities at the first European conference (Lisbon, 1986) did volunteer. Some thirty cities wished to commit themselves to the ambitious goals set. This was more than the WHO infrastructure could initially cope with, and a process of designation for European Healthy Cities was set up, as well as a series of more concrete guidelines such Healthy Cities would have to strive for. The main theme of the Healthy Cities Project within WHO became '... to put health high on social and political agendas' (Tsouros, 1994), not just in officially designated cities, but through a commitment by these cities to the establishment of national networks also in other European cities.

By World Health Day 1996 (8 April), some 3000 cities worldwide had in some way or another joined the international Healthy Cities Network. By the year 2000, we have counted a little more than 4000 cities (figure 3). Kenzer (1999) gives a rather superficial overview of the existing literature on those cities, providing the reader, though, with a very inspiring range of examples of urban health activities in a global perspective.

Only the European Region of the World Health Organization maintained rigorous entry requirements into its Healthy City Network. For the first (1996-1992), second (1993-1998) and third phase (1998-2002) of the Healthy City programme cities had to demonstrate political commitment to Health for All and the Healthy City vision, appropriate resource allocations to secure a full-time project coordinator and support staff in a Healthy City Office, and commitment to specific objectives leading to the establishment of local health policies. In the first phase, among the most important of such objectives was the establishment of an urban health profile. In the second phase, designated cities were supposed to be working on the creation of City Health Plans, and the third phase committed Healthy Cities to the production of a City Health Development Plan and a process of more rigorous internal and external monitoring and evaluation.

For designated European Healthy Cities, the policy development evolution would take them from the production of Health Profiles into the development of City Health Plans, and ultimately City Health Development Plans. A City Health Plan is a policy document including the Health Profile identifying health challenges, their deter-

Figure 3

minants, and roles various actors should play in targeting those challenges. A City Health Development Plan takes the process a step further; it identifies strategic development issues, incorporating also urban planning, sustainable development and equity concerns on a long-term basis.

'The' Healthy City does not exist. First of all, each city is unique in its historical and social development. But more importantly, the context in which cities move towards Healthy City status is markedly different in each of those 3000 cities worldwide. The group of designated European Healthy Cities is the core of 25 European networks (including some 1500 cities) that each may work under their own organizational and ideological prerequisites (Tsouros & Krampac, 1997). In other WHO regions and countries there may be Healthy City networks as well, providing mutual support and information, but under less rigorous conditions. And then there are isolated but enthusiastic endeavours by individual city administrations that lack a formal superstructure guiding their work (Krenzer, 1999, Werna et al., 1998). It should be noted that some of these cities, like Curitiba in Brazil which regards itself an *'Ecological City,'* could be counted among almost proverbial 'Healthy Cities' in which all the core values and strategies of the WHO project are operational, without even having joined the WHO endeavour. Some have noted this as a weakness of the WHO approach, others have used such examples as illustrations of the 'arrogance' international organisations have over unique local action. To us, this phenomenon only signifies the universal applicability of innovative approaches to urban health, with or without the support of global actors.

The qualities of a healthy city a city should strive to provide	
1	a clean, safe physical environment of high quality (including housing quality)
2	an ecosystem that is stable now and sustainable in the long term
3	a strong, mutually supportive and non-exploitive community
4	a high degree of participation and control by the public over decisions affecting their lives
5	the meeting of basic needs (food, water, shelter, income, safety and work) to all people
6	access to a wide variety of experiences and resources, for a wide variety of interaction
7	a diverse, vital and innovative city economy
8	the encouragement of connectedness with the past, and heritage of citydwellers & others
9	a form that is compatible with the past, and enhances the preceding, charecteristics
10	an optimum level of appropriate public health and sick care services accessible to all
11	high health status (high levels of positive health and low levels of disease)

Figure 4

What unites thousands of Healthy Cities?

In her seminal research piece '*Innovations in a Fuzzy Domain*' Marleen Goumans (1998) asked politicians and civil servants in ten British and Dutch cities what their perception of their town being a Healthy City was (cf. also Goumans & Springett, 1997). No two perceptions were alike. Had she included community leaders and NGO representatives, like De Leeuw, Abbema & Commers (1998) did, the picture would have been even fuzzier. Responses range from *good local governance* to *ecological urban planning*, and from *community consultation* to *healthy public transport*.

Looking at writings that are used to underpin Healthy City projects globally, there appears to be somewhat more consistency, but even here the sets of core values range from a number of merely four (WHO/EURO, 1998) to seven (Ashton, 1991), three (Werna et al., 1998, p. 18), six (WHO, 1995, similar to the core principles of the Health for All strategy) or eleven (Tsouros, 1992), figure 4.

In a way, it is peculiar that the thing which has become known as 'The Healthy Cities Movement' (e.g. Tsouros, 1992) seems to have such a limited sense of history; or maybe this is exactly what constitutes a movement: a perceived lack of (theoretical) foundation which is compensated by enormous enthusiasm. A quick guesstimate among colleagues involved in Healthy City implementation both in academia and in practice

would indicate that there is very little sense of the sheer innumerable quantity of booklets, brochures, books published by quite reputable companies, by WHO and by passionate believers, newsletters and articles, which over the years have produced a reasonably solid foundation of the movement.

Most if not all about the foundation of the Healthy City concept has been laid down in a series of WHO publications, most notably the 'yellow booklets' that were published in the late 1980s (Hancock & Duhl, 1988, Kaasjager et al., 1989, Kickbusch, 1989, WHO/EURO 1988a, WHO, 1988b)). Reviewing the material over a decade later, it is striking how much of these writings should still be considered inspirational and validated observations on the creation and maintenance of health promotion in the urban context. Hancock & Duhl (1988, p. 23) point out that a healthy city can only be identified by encountering it: *"It must be experienced, and we must develop and incorporate into our assessment of the health of a city a variety of unconventional, intuitive and holistic measures to supplement the hard data. Indeed, unless data are turned into stories that can be understood by all, they are not effective in any process of change, either political or administrative."*

Since the beginning of the Healthy Cities Project in Europe there have been less or more successful efforts at evaluation of the achievements of the network cities and the Project as a whole (for review, see Curtice, 1995, and Tsouros, 1994). Research in, with for and on healthy cities over time has become an important issue in the movement (De Leeuw, 2000a). There is no conference, seminar or meeting where the research issue has not been debated (De Leeuw et al., 1992). Currently, there still is very little empirical work on Healthy City evaluation, work by Werna & Harpham (1995, 1996) being the exception rather than the rule. Some process evaluation (Goumans, 1998, National Institute of Public Health, 2000, and WHO, 2000) and a few policy studies (Goumans, 1998, Springett, 1998, Goumans & Springett, 1997, De Leeuw et al, 1998, De Leeuw, 1999) indicate that Healthy Cities principles facilitate the development of comprehensive health policies at the local level. However, equivocal notions of what Healthy Cities are all about have obscured the development of a reasonable and validated research paradigm.

Judging all this contextualism and diversity, it might be tempting even to the rational investigator to adopt the words by Italian author Italo Calvino in his '*The Invisible Cities*':

(...) è inutile stabilire se Zenobia sia da classificare tra le città felici o tra quelle infelici. Non è in queste due specie che ha senso dividere le città, ma in altre due: quelle che continuano attraverso gli anni e le mutazioni a dare la loro forma ai desideri e quelle in cui i desideri o riescono a cancellare la città o ne sono cancellati.
(Italo Calvino, Le città invisibili, Le città sottili. 2. 1972)

or in my own limited English translation:

(...) it is useless to establish whether Zenobia should be classified as one of the happy cities, or as one that is unhappy. It does not make sense to divide cities into these two types, but it does into two others: cities that through the years and changing times still shape longing, and cities in which longing manages to wipe away the city, or is being wiped away itself.

Yet, the quote itself is useful in determining the values that unite Healthy Cities globally: they are the values that cities shape themselves for their healthful futures, and developmental perspectives they are trying to maintain or avoid in order to secure a healthy existence in the future. Such values find their foundation in community action, empowerment, sustainable development, equity, and generally in a locality-based strategic and systemic approach of all determinants of health and disease. Hancock and Duhl (1988) have proposed the following working definition for a Healthy City:

A healthy city is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.

This so-called 'working definition' might -even though all-encompassing and inspirational- be regarded as a trifle normative rather than scientifically operative (i.e., a definition which would enable us to formulate theoretical presuppositions and their subsequent research questions). In order to develop a more operational definition, we would want to develop a more generic Healthy City logic. Breaking down the logic of Healthy Cities world-wide (i.e. beyond the strict WHO European Regional normative perspective), then, would lead us to the following:

- the geographical set-up in which most people live is the town or city;
- towns and cities have certain degrees of authority and governance to create, *re*create and maintain their social and physical infrastructures;
- towns and cities are more often than not the lowest level of formal (democratically elected, and therefore accountable to communities) authority and level of governance in a country;

- thus, actions and policies of city authorities impact on the options people have for living.
- The above options are also known as 'determinants' (cf. Marmot & Wilkinson, 1998) of health.
- Local authorities are thus in an ideal position to formulate and implement policies impacting on determinants of health, thereby potentially improving health; however, 'top-down' approaches in policy-making and intervention development are doomed to fail in their sustainability (Boutillier, Cleverly & Labonte, 2000, De Leeuw, 2000b).
- Full involvement of local communities in formulation, implementation and evaluation of health programmes is therefore imperative
- in order to achieve equity in local health.

In spite of the enormous number of (normative) definitions and recipes for *Healthy Cities* (or whatever they are called, such as for instance '*Comunidades Saludables*' in the Americas) we thus propose here as a unifying *'constituent'* definition:

a locality-based strategic and systemic approach of social, physical and individual determinants of health and disease incorporating the full involvement of communities in the formulation, implementation and evaluation of policies and interventions aiming at equity in health and sustainable development.

Apart from defining the *concept* of Healthy Cities, however, it is also important to identify its primary objective(s). As we have stated in an earlier major Healthy City evaluation (De Leeuw, Abbema & Commers, 1998) one can only evaluate what one has set out to do in the first place. Thus: if a health education intervention sets out to reduce the number of eighth-grade pupils from taking up smoking, this is what should be evaluated, and not whether these pupils happen to eat more potato chips in the course of not smoking.

As we have observed above, there are thousands of municipalities and urban governance levels that are now sharing the Healthy City vision. Whether they have committed themselves to achieving specific objectives is an issue that cannot be answered; we are unaware of any exploratory global surveys mapping the existence of specifically formulated individual Healthy City objectives.

A global publication (WHO, 1995, p. 11) states that the core objective of Healthy Cities is *to improve the health of urban dwellers, and especially low income urban dwellers, through improved living conditions and better health services*. However much commendable this objective might be, we do not find that it conveys a vision or innovative networking perspective, which is so direly needed in urban health.

The only group of Healthy Cities that has agreed upon a clearly stated objective is the network of European WHO designated Healthy Cities. In their commitment to a rigorously applied set of designation requirements (WHO/EURO, 1997, see Appendix I for an overview) they share these overarching objectives:

'The WHO Healthy Cities project is a long-term international development project that seeks to put health on the agenda of decision-makers in the cities of Europe and to build a strong lobby for public health at the local level. Ultimately, the project seeks to enhance the physical, social and environmental well-being of the people who live and work in the cities of Europe. The project is one of WHO's main vehicles for giving effect to the strategy for Health for All (HFA).' (Tsouros, 1994, p. 1)

'The strategic objectives for the second phase include the speeding up of the adoption and implementation of policy at city level based on the European HFA policy and its targets; strengthening national and subnational support systems; and building strategic links with other sectors and organizations that have an important influence on urban development.' (Tsouros, 1994, pp. 11-12)

While investigating European Healthy Cities at a comparative level, therefore, only these policy oriented (i.e. *'health on the agenda'*) issues can be the research objective (cf. also Springett, 1998). Many of these issues have been addressed in an investigation funded by the European Union (e.g. De Leeuw, 1999,Capello, 1999, 2000). An important finding of that study was produced by a research team from Milano, demonstrating that the mere involvement of a city in Healthy City networks impacted positively on its capacity to address health and its determinants. One might wonder why this finding in itself would not be convincing enough evidence for anyone to start participation in the Healthy City movement.

Creating evidence for Healthy Cities

Or wouldn't there? Some authors have argued that the diversity of perspectives of the Healthy Cities movement is its strength, and that precisely this strength should be mapped and understood. This mapping has been going on since the very beginning of the programme, in 1986. Enormous collections of 'best practices' have been amassed, which lead a rather successful life in themselves as sources of inspiration of Healthy City officers and community leaders (e.g. Price & Tsouros, 1996).

Still, inspiration by a good story is only one piece of evidence. Epidemiologists would be tempted to refute a story as proof of the efficacy of an intervention; they would go for the randomized control trials, hard numbers, small α's and even smaller p-values. This seems to be a conflict never to be resolved.

Yet, 'focussed' theories on specific elements of the Healthy City vision yield effectiveness insights in, e.g. community participation for health (such as works by Minkler, 1997, Bracht, 1999, Boutilier, Cleverly & Labonté, 2000) and intersectoral action (Gillies, 1998, Taket & White, 2000). But it seems it is the synergistic element of Healthy Cities that requires further evidence development.

It is worth pointing out here that the uniqueness of Healthy Cities does not lay in their application of models of community action, or of determinants-based health education campaigns, or of a policy-driven urban perspective. Goumans (1998) has demonstrated that in their operational functions, Healthy Cities can be divided as falling into three models: the *Health* model, the *City* model, and the *Vision* model. In the *Health* model, Healthy Cities use the WHO vision in order to develop and implement innovative health promotion interventions. In the *City* model, Healthy Cities feel enabled to use the concept to develop and improve intersectoral urban *policies for health*. And finally, in the *Vision* model, the Healthy City becomes a vehicle to enhance the health of the city (economically, ecologically, psychologically, etc.) rather than only that of its population. This means that the question whether the Healthy City (as a generic concept) *'works'* could never be answered: evidence in its synergy would have to demonstrate how each city reaches the specificity of its own objectives.

Monitoring, Accountability, Reporting, and Impact assessment: MARI

An example of a programme in monitoring and evaluation in Healthy Cities that aims precisely at those synergistic effects is provided by the European WHO Healthy Cities Project in its third phase.

Healthy Cities need to show their communities, their politicians and their partners that their work yields real results. Showing results, that is, being accountable, can be done in different ways. It is a true, and shared, responsibility for Healthy City operators and researchers. We feel that the research community should nurture the Healthy City movement more than it has done so far. Until now, academia has looked upon Healthy Cities with justifiable criticism. Good research, however, would intend to support Healthy City endeavours, and identify their weak points with constructive critique.

In Phases I and II of the Project cities were required to produce Health Profiles and City Health Plans. For the first (1996-1992), second (1993-1998) and third phase (1998-2002) of the Healthy City programme cities had to demonstrate political commitment to Health for All and the Healthy City vision, appropriate resource allocations to secure a full-time project coordinator and support staff in a Healthy City Office, and commitment to specific objectives leading to the establishment of local health policies. In the first phase, among the most important of such objectives was the establishment of an urban health profile (Doyle et al, 1996, Garcia & McCarthy, 1994, WHO/EURO, 1998). In the second phase, designated cities were supposed to be working on the creation of City Health Plans (e.g. De Leeuw, 1999), and the third phase committed Healthy Cities to the production of a City Health Development Plan and a process of more rigorous internal and external monitoring and evaluation. The mere production of such reports was a major step towards accountability in itself. Profiles and Health Plans showed the need for action in health, social and sustainable development. However, a city would need to go beyond such needs assessments in order to show that its activities have an impact.

Impact can be determined in different ways. Traditionally, the impact of health interventions was measured in terms of morbidity and mortality outcomes: the presence or absence of death and disease are considered relatively simple proxies for health status in a specified area. However, description of morbidity and mortality measures is in no way an indicator for the degree to which health, well-being and quality of life are currently enjoyed or pursued by communities and cities. Health determinants analyses, and sound and responsible approaches towards influencing determinants of health, would provide relevant and important information on the impact of Healthy City interventions.

Such sound and responsible approaches have now been identified as core principles of the Healthy Cities Project. Cities designated for participation in the Third Phase of the Project have subscribed and committed themselves to such principles.

Research in, with, for and on Healthy Cities has always been a crucial component of the European Project. In the First Phase, cities were invited to contribute to our overall knowledge by filling out a *Healthy Cities Questionnaire*. The responses to that questionnaire have led to the production of a number of pub-

lications, most notably the *Twenty Steps* and *A Project Becomes a Movement* books; these publications still play a very inspirational role in setting up and maintaining Healthy City projects.

In the Second Phase, research and evaluation have been even more prominent. In this five-year period, various studies were undertaken to assess Healthy City processes. Analyses of Health Profiles and Health Plans were supplemented by studies of, among others, policies and networks in Healthy Cities, research needs and research capacities of cities themselves, inventories of project management and national networks, and reviews of tobacco initiatives and city progress reports. The collection of case studies and models of good practice is growing every day. Currently, a project is underway to pull together the findings of these thousands of pages of research.

The Healthy Cities Project Office of the European Region has since long enjoyed the expert advice from an *Indicators Group* that meets regularly in order to collect, analyse and assess a coherent set of health indicators developed for use in the European environment. The set of indicators includes four health, seven health service, fourteen environmental, and eight socio-economic indicators; some of these (e.g. mortality, and cause of death) are broken down into sub-indicators. The indicator *'mortality: all causes'* also includes data on seventeen age-specific rates. Similarly, *'cause of death'* is compiled of twelve cause-specific death rates. A first analysis was published in 1996 by Doyle et al. The 2000 report is currently being prepared by the Danish National Institute of Public Health in Copenhagen. As yet, the merit of such reports may not be the attribution of 'the Healthy City intervention' to changes in health outcomes or determinants of health. These reports are valued by participating cities for their comparative strength and give local politicians arguments and legitimacy for the continuation of their commitment to the Project.

The Third Phase of the Project has committed itself to a systematic and continuous approach to monitoring and evaluation. The foundation of that programme is the MARI Framework (Monitoring, Accountability, Reporting, and Impact assessment; WHO/EURO, 1999). MARI strives to empower cities in their own research and evaluation efforts. It is a set of nearly four hundred questions structured like the designation requirements (Appendix 1) and three types of questions that they may apply to the monitoring and evaluation of those requirements:

- Questions into presence of policies, adherence to principles, and involvement of actors;
- Questions involving processes of change;
- Questions aimed at the identification of results, impact, outcomes and outputs.

It is expressly *not* the purpose of the framework that cities themselves will spend a disproportionate amount of time on answering the questions. At best, they might want to do that once during the running period of the Third Phase (five years). The full MARI framework is intended to inspire cities to ask themselves proper evaluative questions, involve local academia, and set up bodies to advise local authorities in commissioning relevant research projects (EACs: Evaluation Advisory Committees).

Healthy City 'Outcomes'

As a function of the full MARI framework, WHO developed an Annual Reporting Template, ART. Rather than indulging into a grand exercise with four hundred questions, cities committed themselves to produce annual reports. The MARI framework served as a basis for the template for those annual reports. It covers the four basic elements of action in Healthy Cities (cf. the headings of the designation criteria in Appendix 1) and the same three types of questions identified above. A fictitious city was invented (Mîzopør) for which an example of a good Annual Report was developed. This example was sent to the group of 40 cities officially designated by September, 1999. Due to late and incomplete responses from cities (for which a non-response survey was carried out, indicating that non-response cities did not have adequate (human) resources to produce a report) the analysis of the reports was produced in November, 2000 (De Leeuw, 2000c).

Twenty-five out of forty cities responded, implementing over 1000 activities in the Healthy City realm. The response on the operations of the Project Offices yielded between seven activities (Pécs, Hungary) and around 150 (Rotterdam, The Netherlands and Gothenburg, Sweden). Very few of those activities showed a strategic perspective, thus underscoring the earlier observed degree of 'projectism' in cities (Goumans, 1998, Goumans & Springett, 1998) that would hinder the development of urban health policies, or, in terms of Phase III of the European Healthy City Project, 'City Health Development Plans'. It is too early to see whether the five-year strategic perspective offered by WHO throughout this phase contributes to this development. Analysis of future Annual Reports will provide a time-series analy-

sis. However, findings from an evaluation of ten cities in Phase II (De Leeuw, Abbema & Commers, 1998) showed that particularly the *requirement* by WHO to develop Health Profiles and City Health Plans contributed to the implementation of steps towards those goals. This would indicate that the projectism identified in the analysis of the 1999 Annual Reports would wither, and eventually that activities would contribute to a City Health Development Plan which does address urban health issues in an effective manner.

Slowly, other studies on the effects and outcomes begin to emerge. Capello (1999, 2000) demonstrated by means of econometric analysis that active participation in WHO Healthy City networking resulted in longer-term and more sustainable health policy development among designated Healthy Cities. De Leeuw (1999) showed that those cities that connected the urban planning and social change paradigms to a broad understanding of health were able to initiate and maintain intensive community-based health promotion programmes.

Conclusion

The international Healthy Cities movement has blossomed and expanded since its inception by WHO in 1986. Urban issues seem to have acquired increasing prominence in global circles (apart from the Asia-Pacific Economic Cooperation *Healthy Megacities* programme, the United Nations Centre for Human Settlements UNCHS (Habitat) *Inclusive City*, WHO's *Healthy Cities* and a European *Sustainable Cities and Towns Campaign* recently a *Child-Friendly City* initiative was started by UNICEF). A scientific and empirical paradigm for the definition and study of such urban initiatives and a comprehensive approach to the complex relations between public health and urban planning are yet still in the making.

It seems that the WHO Healthy City movement is advancing towards such a paradigm. After a decade of predominantly undertaking case-study research and process evaluations the MARI framework appears to be developing an impact-driven evaluation perspective co-created with its member cities and networks.

Appendix I Designation requirements Healthy Cities WHO European Regional Office

A Endorsement of principles and strategies

1. Cities must have sustained local government support and support from key decision-makers in other sectors to the principles and goals of the project.
2. Cities must have in place mechanisms which ensure an integrative approach to health planning, with links being made between their health policies and other key city-wide strategies, and their health strategies and city-based work on Agenda 21.
3. Cities should develop policies and strategies based on health for all for the twenty-first century. Particular emphasis should be placed on the three issues of 1) reducing inequalities in health, 2) working to achieve social development, and 3) commitment to sustainable deveo-pment.
4. Cities should select at least one additional target of health for all for the twenty-first century, which has particular local impor-tance. Progress towards this target should be carefully monitored.

B Establishment of project infrastructures

1. Cities must have an intersectoral steering group involving political / executive-level decision-makers.
2. Cities must have a full-time identified project coordinator or equivalent and administrative/ technical support for the project. The project coordinator must have proven fluency in English.
3. Cities must identify and give commitment to the package of resources required to implement the strategies and action plans for Phase III.
4. Cities should review project management proesses and implement a programme of action to address identified weaknesses.
5. Cities should demonstrate increased public participation in the decision-making processes that affect health in the city, thereby contributing to the empowerment of local people.
6. Cities should establish mechanisms for the engagement of the business sector in local action for health, at both policy and operational levels.

see next page

7a Cities should implement a communications strategy, involving a range of communications mechanisms, to stimulate visibility for health issues and public health debate within the city; this strategy should be evaluated to assess its impact; **and/or**

7b cities should implement an ongoing programme of training/capacity-building activities for health and healthy public policy making; this programme should have two strands: involving key decision-makers across the different sectors in the city, and involving local communities and opinion leaders; the impact of this programme should be evaluated.

C Commitment to specific goals, products, changes and outcomes

1 Cities must produce and implement a city health development plan during the third phase, which builds on previous integrative city health planning and reflects the values, principles and objectives of health for all for the twenty-first century and Local Agenda 21; relevant national health strategies; and local city-specific priorities. This plan must have clear long term and short term aims and objectives and a system on how the city will monitor whether these objectives have been met (indicators and evaluation framework).

2 Cities should implement a programme of systematic health monitoring and evaluation, integrated with the city health development plan, to assess the health, environmental and social impact of policies within the city. In addition, cities should strengthen health accountability mechanisms and measures.

3 Cities should implement a programme of action targeted at reducing health inequalities within the city

4 Cities should carry out a programme of action to promote healthy and sustainable urban planning policies and practice within the city.

5 Cities should develop and implement a tobacco control strategy, in line with WHO's identification of tobacco as a strategic priority.

6 Cities should implement and evaluate a comprehensive programme of activity to address **at least one** of the following priority topics: social exclusion, healthy settings, healthy transport, children, older people, addictions, civil and domestic violence, accidents.

D Investment in formal and informal networking and cooperation

1 Cities must give executive and political comitment for the attendance of the project coordinator and nominated politician at WHO business meetings and symposia. At each, the city should be represented, as a minimum, by the coordinator and politician responsible.

2 Cities should ensure that their Mayor (or lead politician) attends the Mayors' Meetings at start of the phase (1998) and midway through it (in the year 2000).

3 Cities should be connected to the Internet and electronic mail, and ideally should have access to video-conferencing facilities.

4 Cities should participate actively in different networking activities (thematic, sub-regional, strategic, twinning, etc.) during the phase, including the development of close links with national networks. Cities should demonstrate practical contributions to these networks throughout the phase.

References

- Aicher, (1998) *Designing Healthy Cities - Prescriptions, Principles, and Practice.* Krieger Publishing Co.
- APEC, Asia-Pacific Economic Cooperation, APEC Industrial Science and Technology Working Group (2000) *Healthy Futures for APEC Megacities. Volume I Summary Report of a Foresight Project.* The APEC Center for Technology Foresight, National Science and Technology Development Agency, Bangkok
- Ashton, J. (1991) *Healthy Cities*. Open University Press, Milton Keynes
- Barton, H. & C. Tsourou (2000) *Healthy Urban Planning.* SPON Press, London
- Boutilier, M., S. Cleverly & R. Labonté (2000) *Community as a setting for Health Promotion*. Chapter 7 in: In: Poland, B., Rootman, I. & Green, L., eds. (2000) *Settings for Health Promotion*. Sage, Beverly Hills
- Bracht, N. (1999) *Health Promotion at the Community Level*, 2nd edition. Sage, Beverly Hills
- 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
- Curtice, L. (1995) *Towards the evaluation of the second phase of the WHO Healthy Cities Project.* WHO Internal document, January 1995
- Czerwinksi, S. (1999) *Nutritional status and its health consequences among low-income urban pregnant women: diet and environmental toxicants.* Ch. 11 (210-230) in: Schell, L.M. & S.J. Ulijaszek, eds. (1999) *Urbanism, Health and Human Biology in Industrialised Countries.* Society for the Study of Human Biology Symposium 39. Cambridge University Press, Cambridge
- Dowler, E. (1999) *Urban poverty and nutrition in the United Kingdom*. Ch. 9 (175-191) in: Schell, L.M. & S.J. Ulijaszek, eds. (1999) *Urbanism, Health and Human Biology in Industrialised Countries*. Society for the Study of Human Biology Symposium 39. Cambridge University Press, Cambridge
- Doyle, Y., D. Brunning, C. Cryer, S. Hedley & C. Russell Hodgson (1996) *Healthy Cities Indicators: Analysis of Data from Cities across Europe*. Edited by P. Webster & C. Price. World Health Organization European Regional Office, Copenhagen
- Duhl, L., ed. (1963) *The Urban Condition: People and Policy in the Metropolis*. New York, Simon & Schuster
- European Commission (1994) *European Commission Expert Group on the Urban Environment; European Sustainable Cities*. Office for Official Publications of the European Communities, Luxembourg (also available at http://europa.eu.int/comm/environment/urban/rport-en.pdf)
- Garcia, P. & M. McCarthy (1994) *Measuring Health. A step in the development of city health profiles*. World Health Organization European Regional Office, Copenhagen
- Gillies, P. (1998) Effectiveness of alliances and partnerships for health promotion. *Health Promotion International* 13 (2) 99-120
- Goumans, M. & J. Springett (1997) From projects to policy: 'Healthy Cities' as a mechanism for policy change for health? *Health Promotion International*, 12 (4) 311-322
- Goumans, M. (1998) *Innovations in a Fuzzy Domain. Healthy Cities and (Health) Policy Development in the Netherlands and the United Kingdom*. PhD Thesis Universiteit Maastricht, Maastricht
- Hancock, T. & L. Duhl (1988) *Promoting Health in the Urban Context*. WHO Healthy Cities Papers No. 1. FADL Publishers, Copenhagen
- Johnston, F.E. & P. Gordon-Larsen (1999) *Poverty, nutrition and obesity in the USA*. Ch. 10 (192-209) in: Schell, L.M. & S.J. Ulijaszek, eds. (1999) *Urbanism, Health and Human Biology in Industrialised Countries*. Society for the Study of Human Biology Symposium 39. Cambridge University Press, Cambridge
- Kaasjager, D.C., L.J.G. van der Maesen & H.G.J. Nijhuis, eds. (1989) *The New Public Health in an Urban Context. Paradoxes and Solutions*. WHO Healthy Cities Papers No. 4. FADL Publishers, Copenhagen
- Kenzer, M. (1999) Healthy cities: a guide to the literature. *Environment and urbanization* 11 (1) 201-220
- Kickbusch, I. (1989) *Good planets are hard to find*. WHO Healthy Cities Papers No. 5. FADL Publishers, Copenhagen
- Leeuw, E. de (1989a) *The Sane Revolution - Health Promotion: backgrounds, scope, prospects*. Van Gorcum, Assen/Maastricht-
- Leeuw, E. de (1989b) *Health Policy. An exploratory inquiry into the development of policy for the new public health in The Netherlands*. PhD dissertation, University of Limburg, Maastricht, The Netherlands
- Leeuw, E. de (1993) Health policy, epidemiology and power: the interest web. *Health Promotion International*, 8 (1) 49-52
- Leeuw, E. de (1999) Healthy Cities: Urban Social Entrepreneurship for Health. *Health Promotion International*, 14 (3) 261-269
- Leeuw, E. de (2000a) *Nurturing Healthy Cities: Research Responsibility and Accountability.* Proceedings, International Conference on Healthy Cities and Urban Policy Research. Tokyo Dental and Medical University, Tokyo, 12-16 March
- Leeuw, E. de (2000b) *Beyond community action: communication arrangements and policy networks*. In: Poland, B., Rootman, I. & Green, L., eds. (2000) Settings for Health Promotion. Sage, Beverly Hills
- Leeuw, E. de (2000c) WHO European Healthy Cities Project - Phase III. *Analysis of 1999 Annual Reports*. World Health Organisation Collaborating Centre for Research on Healthy Cities, Maastricht
- Leeuw, E. de, M. O'Neill, M. Goumans & F. de Bruijn (1992) *Healthy Cities Research Agenda. Proceedings of an expert panel.* RHC Monograph Series No. 2. Maastricht
- Leeuw, E. de, E. Abbema & M. Commers (1998) *Healthy Cities Policy Evaluation. Final Report.* World Health Organization Collaborating Centre for Research on Healthy Cities, Maastricht
- Milewa, T. & E. de Leeuw (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*. Rutgers University Press, New Brunswick, New Jersey, London
- National Institute of Public Health (2000) *Denmark's network of healthy cities. A process evaluation.* National Institute of Public Health, Copenhagen (ISBN 87-7899-015-7)
- Newman, P. & J. Kenworthy (1999) *Sustainability and cities: overcoming automobile dependence*. Island Press, Washington DC
- Price, C. & A. Tsouros (1996) *Our Cities, Our Future: Policies and Action Plans for Health and Sustainable Development*. World Health Organization European Regional Office, Healthy City Project Office, Copenhagen
- Schell, L.M. & S.J. Ulijaszek, eds. (1999) *Urbanism, Health and Human Biology in Industrialised Countries*. Society for the Study of Human Biology Symposium 39. Cambridge University Press, Cambridge
- Springett, J. (1998) *Quality measures and evaluation of Healthy City policy initiatives: the Liverpool experience.* Pp. 165-188, Ch. 9 in: Davies, J.K. & G. Macdonald, eds. (1998) *Quality, Evidence and Effectiveness in Health Promotion. Striving for certainties*. Routledge, London/New York
- Taket, A. & L. White (2000) *Partnership and Participation. Decision-making in the multiagency setting.* Wiley, New York
- Tsouros, A. (1994). *The WHO Healthy Cities Project: State of the art and future plans*. Copenhagen: WHO/EURO/HCPO.
- Tsouros, A. & I. Krampac (1997) *National Healthy Cities Networks in Europe.* Third edition. WHO/ EURO & EURONET, Copenhagen
- Werna, E. & T. Harpham (1995) The Evaluation of Healthy City Projects in Developing Countries. *Habitat Int'l*, 19 (4), 629-641
- Werna, E. & T. Harpham (1996) The Implementation of the Healthy Cities Project in Developing Countries: Lessons from Chittagong. *Habitat Int'l*, 20 (2), 221-228
- Werna, E., T. Harpham, I. Blue & G. Goldstein (1998) *Healthy city projects in developing countries. An international approach to local problems*. Earthscan, London
- WHO (1995) *Building a healthy city: a practioners guide. A step-by-step approach to implementing healthy city projects in low-income countries*. A manual prepared by the Unit of Urban Environmental Health, Division of Operational Support in Environmental Health, WHO, Geneva (WHO/EOS/95.10)
- WHO Healthy Cities Project (1988b) *A Guide to Assessing Healthy Cities*. WHO Healthy Cities Papers No. 3. FADL Publishers, Copenhagen
- WHO Healthy Cities Project (1988a) *Five-Year Planning Framework*. WHO Healthy Cities Papers No. 2. FADL Publishers, Copenhagen
- WHO/EURO (1998) *City Health Profiles. A review of progress*. World Health Organization European Regional Office, Copenhagen
- WHO/EURO (1999) Monitoring, Accountability, Reporting, and Impact assessment, MARI: A Framework for Phase III Healthy Cities. *Prepared for WHO Healthy Cities Project Business Meeting, Bologna, 1999* World Health Organization European Regional Office, Copenhagen
- WHO & Health Canada (1986) Ottawa Charter for Health Promotion. Ottawa
- WHO (1997) The Jakarta Declaration: New Players for a New Era. WHO/Republik Indonesia, Geneva/ Jakarta
- WHO (2000) Healthy Cities in Action: 5 case-studies from Africa, Asia, Middle East and Latin America. WHO/UNDP-LIFE Healthy City Projects in Five Countries: An Evaluation. Department of Protection of the Human Environment, WHO, Geneva (WHO/SDE/PHE/00.02)