MANAGEMENT IN HEALTH CARE PRACTICE	
A Handbook for Teachers, Researchers and Health Professionals	
Title	COMMUNITY HEALTH - PUBLIC HEALTH
THE	RESEARCH METHODS AND PRACTICE
Module: 3.2	ECTS (suggested): 0.3
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Keywords	Society, public health, methods, health promotion, equity, community
Learning	After completing this module students and public health professionals
objectives	should:
	 understand meaning of community structure and dynamics for
	public health practice
	• increase knowledge on community structures, dynamics and
	research models in public health
	• recognize basic approaches for community based (and
	participatory) public health intervention
	• differentiate various approaches for applied community studies
	• identified relations between community research and practice
	• improve capability to work with and inside the community
Abstract	For few decades the value of a community, empowerment,
	community-based care, population-based needs assessment was discussed, but not so much of the evidence of this commitment was
	found in the public health interventions. Potential contributions from
	the social sciences tend to be overwhelmed by the appeal of the
	biomedical and behavioural sciences. Three concepts and notions
	notion of community in public health were dominated: First,
	community- a lots and lots of people or community as the population;
	second could be described as community as "giant reinforcement
	schedule" or community as setting, with aspects of that setting being
	used as levers to support and maintain individual behaviour change.
	The third, newest, approach sees community as "eco-system with
	capacity to work towards solutions to its own community identified
	problems" or to see it as a social system. This notion of community
	focused on strengths instead merely on deficits. Two groups of research activities (systematic study of communities and inequality
	research) supported with evidence from many applied researches
	done through development of European Healthy Cities Project
	contributed to this shift in perception of the value of the community.
	In this course we elaborate <i>inequity research</i> , "System" study of
	communities and present case study: "Community applied research in
	Croatia- "triggered" by Healthy Cities"
Teaching	-lectures
methods	-seminar presentations and discussion (for the selected topics - each
	student)
	-individual/small group seminars paper and presentation preparation

Specific	Total of 9 teaching hours consist of:
recommenda	5 contacts hours – lectures (2) + seminar presentations and discussion
tions	(3)
for teachers	4 individual/small group hours - seminars paper and presentation
	preparation
Assessment	Seminar paper – selected topics for individual tasks and presentations
of	+ Structured essay with selected topics covering most of the course
Students	objectives

COMMUNITY HEALTH - PUBLIC HEALTH RESEARCH METHODS AND PRACTICE Selma Šogorić, Aleksandar Džakula

THEORETICAL BACKGROUND

Community and public health

Throughout the sixties, seventies and eighties much of the rhetoric in public health paid lip service to the value of a community, empowerment, community-based care, population-based needs assessment and so on, but we could not see much of the evidence of this commitment in the day-to-day service provision of practitioners or in design applied in public health interventions. Potential contributions from the social sciences tend to be overwhelmed by the appeal of the biomedical and behavioural sciences. The most common notion of community in public health was the most simple - a lots and lots of people or community as the population. This notion is illustrated in large-scale community interventions propelled by the concern to reach as many people as possible and make best use of scarce program resources. The outcome evaluation of these interventions usually amounts to summing up changes made by individuals in relation to the problem of interest. The greater the number of people who change, the more successful is the intervention (1). The second approach to community borne out of the first could be described as community as "giant reinforcement schedule" or community as setting, with aspects of that setting being used as levers to support and maintain individual behaviour change. In this approach, organizations, groups and key individuals in the community are valued because of their capacity to translate the health messages of the campaign into the local culture. The evaluation of this model rests principally on aggregating changes made by individuals in the population (1,2,3,4). The third, newest, approach developed throughout the nineties sees community as "eco-system with capacity to work towards solutions to its own community identified problems" or to see it as a social system. This notion of community focused on strengths instead merely on deficits. The evaluation in these case attempts to capture changes in community processes and structures, as outcomes (1).

Two groups of research activities (systematic study of communities and inequality research) supported with evidence from many applied researches done through development of European Healthy Cities Project contributed to this shift in perception of the value of the community.

Inequality research

Firstly, we acknowledge that people do not live in vacuum. The notion that behaviour is greatly influenced by social context in which people lead their lives has finally get through to public health practitioners. Many sociologists have argued that the lives of individuals are affected not only by their personal characteristics but also by characteristics of the social group their belong (5,6) They say that "lifestyle" and "behaviours" were regarded as matters of free individual choice and dissociated from the social context that shape and constrain them (7,8,9). With their work they confronted prevalent the "web of causation" model and blame it for progressive "individualization" of risk (i.e. attributing risk to characteristics of individuals rather than to environmental or social influences affecting populations). Simultaneously, tremendous shift in value position, from victim blaming, through relative status in social

milieu, to density of links and caring in a social structure, has been done through the evolution of causal explanations of inequalities (6).

The traditional explanation of inequalities in health is that they are caused by the behaviour of those from the lower socio-economic classes who drink, smoke and generally engage in too many "risk behaviours" leading to their early demise from heart disease, lung cancer and so on. The solution is therefore, to modify their risky behaviours and so anti-smoking campaigns and other health promotion programs were launched. Unfortunately, historical data shows that such inequalities are independent of the causes of death and they are as prevalent now as they were when the main causes of death were entirely different at the run of the past century.

The next level of explanation is that the inequality is caused by the material deprivation suffered by those in the lower socio-economic groups – poor housing, poor nutrition, inadequate heating, air pollution, inadequate access to care and so on. The solution, therefore, is to provide income or other resource support to the poor in society, enough to raise them above some declared level of deprivation. Although there is undoubtedly some truth to this proposed causal model, Marmot's data from the British civil service study tells us that it is far from the whole story (10). Across five classes of civil servants all of whom are "well-off", there are marked inequalities in health; none suffer what could be called "deprivation". So, aside from the evidence on absolute deprivation, there is growing evidence that the relative distribution of income in a society matters in its own right for population health.

This next level of explanation was given by Wilkinson (11). In his research he found strong negative association between the degree of income inequality in a country and its health as measured by mortality statistics. Here the model proposed is that the feelings of relative deprivation among those in the lower half of the income distribution express themselves through neuro-immunological systems as disease and death. The larger the differences the more likely and the more severe are the negative health consequences. Low control, insecurity and loss of self-esteem are among the psychosocial risk factors known to mediate between health and socioeconomic circumstances. Exposure to chronic mental and emotional stress (associated with social position) will increase probability of acquiring risky behaviours - stress related smoking, drinking, eating "for comfort", etc. The implied solution in this case would be development of more egalitarian society e.g. the reduction in income inequalities by better distribution of wealth in society.

This level of explanation has been pushed one step further by work of Kennedy and Kawachi (12,13,14). In the American study by Kennedy income inequality at the state level was strongly correlated with total mortality. Income inequality was measured in that study by the Robin Hood index, which is the proportion of aggregate income that needs to be redistributed from the rich to the poor so as to achieve equality of income. A 1% rise in the Robin Hood index was associated with an excess mortality of 21.7 deaths per 100 000, suggesting that even a modest reduction in inequality could have an important impact on populations health. The maldistribution of income was related not only to total mortality but also to infant mortality, homicides, and deaths from cardiovascular diseases and neoplasm. In an independent study, Kaplan (15) examined the association between income inequality - as measured by the share of aggregated income earned by the bottom 50% of households - and state level variations in total mortality. A strong association was found between their measure of income inequality and age-adjusted total mortality rates in 1990. Moreover, the degree of income inequality in each state in 1980 was a powerful predictor of levels of total mortality 10 years later. The repeated corroboration of the hypothesis that income inequality is harmful to health has spurred the search for the pathways and mechanisms underlying this relation. One hypothesis was that rising income inequality results in increased level of frustration,

which may have deleterious behavioural and health consequences. Societies that permit large disparities in income to develop also tend to be the ones that under invest in human capital (e.g. education), health care, and other factors that promote health. The growing gap between the rich and the poor has led to declining levels of social cohesion and trust, or disinvestments in "social capital". Social capital has been defined as the features of social organization, such as civic participation, norms of reciprocity, and trust in others that facilitate cooperation for mutual benefit. Social capital is thus a community- level variable whose counterpart at the individual level is measured by person's social networks. The core concept of social capital, according to its principal theorists (Putnam) consists of civic engagement and levels of mutual trust among community members. So, by connecting levels of civic trust (perceived levels of fairness and helpfulness) and density of associational membership with degree of income inequity on one side and mortality on other Kawachi isolated social capital, as a mediating mechanism.

The work of Kaplan, Kennedy, and Kawachi is telling us that the growing gap between the rich and the poor affects the social organization of communities and that the resulting damage to the social fabric may have profound implications for public's health. Although the role of economic characteristics in relationship between social capital and health has not been thoroughly elucidated (Veenstra 16) contemporary public health tend to focus less on the individual and more on the social system's influence on health accepting that "the way we organize our society, the extent to which we encourage interaction among the citizenry and the degree to which we trust and associate with each other in caring communities is probably the most important determinant of our health" (6).

"System" study of communities

During the last few decades' significant work has been done by social scientists engaged in the systematic study of communities. From this work, at least two important principles can be identified (17). The first relates to definitions of community, and the second applies a "system" perspective to communities. The first approach to community is based on notion that communities form a whole greater than the assemblage of individuals within them. The community components include locality, an interdependent social group, interpersonal relationship, and a culture that includes values, norms, and attachments to the community as a whole as well to its parts. The second, system view sees communities, simply as a system, which includes individuals, subsystems, and the interrelationship among the subsystems. Anthropologists have identified important subsystems of any community system: political sector, religious sector, recreational sector, and social welfare sector. In addition, community organization studies have identified two additional sectors being important for achieving changes in the community system: voluntary and civic groups, such as health-related agencies, political action groups, and other grass-roots groups, and other groups that may be specific to particular community. From a system perspective, a change in one sector usually implies that adjustment or response will eventually occur in other parts of the system. Change that begins with one sector, however, may take a long time to affect the entire system. In addition, many factors may interrupt of divert the change effort. From a community organization perspective, the target of change is generally the entire system - the community itself. From this perspective, it is not enough to change only a sector or part of the community, although changes in the sectors or subsystems, especially the political or economic spheres, may contribute to overall system change. Sanders (17) delineate the following community components: economic institutions, local government, health, education, social welfare, religion, recreation, social networks, the family and social groupings. Each component could be subdivided and number of community units may be

expanded endlessly. Rothman (18) defines social participation as a core element of social health and for him socially healthy community is the one sufficiently endowed with a matrix of social units that allow participation. In his opinion policy-making unit (decision-making bodies) are critical components of the entire community system, because improving the social or physical health of any population group may require health promotion policies. Those policies could (1) help individuals change their own personal health related behaviours, (2) reduce environmental obstacles to health-promoting behaviour and/ or (3) reduce or eliminate factors in the physical or social environment that are detrimental to health. Conscious individual action can be facilitated by "micro-strategies" like for example teaching low income people to prepare nutritious meals using inexpensive food. Often, such individual behaviours are discouraged by environmental conditions such are high prices for more nutritious foods. Introducing food stamps was kind of policy designed, for example, to reduce economic (environmental) barriers to nutritious diet. Finally, environmental hazards may be eliminated by "macro-strategies" e.g. "technological bypass" - by changing potentially detrimental experience of individuals without their direct involvement, like for example legislative action that could lower pricing of more nutritious as compared to less nutritious food. Decision-making units may be favourable, neutral, or unfavourable to establishing relevant policies on the issue. If unfavourable, considerable community effort may be required, a wide scope of community units may need to be mobilized and political pressure tactics may be necessary. Even if the decision-making body is favourable, substantial community organization may be required as resources are always scarce and competing claims inundate those with decision-making power and responsibility. The source of initiation of the policy change (for example relatively powerless citizens, elite group, or established health professionals or organization) may shape the form of community action.

Rothman (18) described three general forms of community intervention: locality development, social planning, and social action. The first one maximizes local participation (ownership); the second emphasizes rational planning and problem solving and the third uses mobilization and activation of disadvanced groups.

As a part of the effort to influence local public policy community has to get organized. Brown's model of community organization for action (19) comprises four phases – preorganizational conditions, community organization, policy influence and policy decision. First phase, a pre-organizational condition includes: needs, predisposition to organize and enabling resources (factors) for organizing. Second phase, community organization includes: process of organized action, technical support and expanded (outside the constituency) support and opposition. Third phase, policy influence identifies and described the target of community action: receptivity of policy-making body and noncommunity (external) factors. And fourth phase, policy decision represents the culmination of the whole process, the extend to which policies have been changed according to objectives of the initial action. By offering nine categories of indicators to describe community organization's efforts to influence local public policy Brown's model is helping us to develop better understanding of mechanisms of community action, enables monitoring of process of change and teach us what forms and strategies of community action may be most effective in promoting health.

Another very useful concept for public health practitioners is the one developed by Partick and Wickizer (17). They explained that the social system in a community relevant to health consists of at least three elements: physical structure, social structure and social cohesion. A community's physical structure (urban planning, the design of suburban housing developments, parks and green areas, industry) has both direct influences on health through exposure to risk and indirect influences on health through the creation or neglect of health-inducing environments. Social structure in a community is reflected in such things as its meeting places, mechanisms for income redistribution, sports leagues, clubs, associations and all the elements of a community that allow for the exchange of views and values and engender mutual trust. This, too, has both, direct effects on health, and indirect through facilitating collective problem solving or collective identity. Finally, social cohesion is very much the product of the adequacy of physical and social structure in a community. Along with such things as the cultural or social homogeneity of a community, physical and social structure can either encourage or discourage mutual support and caring, self-esteem and sense of belonging, and enriched social relationship. All of these have been shown, largely by social scientists, to have an influence on the health of a community's members.

CASE STUDY

Community applied research in Croatia - "triggered" by Healthy Cities

During the eighteen years of the Healthy Cities project existence in Europe much of the earlier mentioned "theory" has been learned experientially. The Healthy Cities (HC) Project, initiated by the WHO European Office in 1986, is a long-term international development project that seeks to put health on the agenda of decision-makers in cities and to build a strong lobby for public health at the local level. The crucial notion that stimulates HC project development was the recognition of importance of the political will. The Healthy Cities Project challenges cities to take seriously the process of developing health–enhancing public policies that create physical and social environments that support health and strengthen community action for health. Initiating the Healthy Cities Project process requires explicit political commitment and consensus across party political lines, leading to sound project infrastructure, clear strategy, participation mechanisms and broadly-based ownership (20,21). Healthy Cities is about change, openness to participation, innovation and formal system reorientation. It is changing the ways in which individuals, communities, private and voluntary organizations and local governments think about, understand and make decisions about health.

European cities in general are challenged with complex public health issues like poverty, violence, social exclusion, pollution, substandard housing, the unmet needs of elderly and young people, homeless people and migrants, unhealthy spatial planning, the lack of participatory practices, and unsustainable development (21). Due to the war and post-war transition, Croatian cities are faced with many others, like, for example, mental health, posttraumatic disorders, quality of life of disabled, family health, community regeneration and community capacity building, unemployment, especially among young and mid career workers, stress, alcohol, tobacco and substance misuse, etc (22). The Healthy Cities Project framework provided the testing ground for applying new strategies and methods for addressing these issues in Croatia.

In the early 1990s, migrations caused by war undermined the credibility of the dominant positivist perspective of demographic analyses, statistical studies and quantitative health indicators (23,24,25). All health indicators obtained at that time were based on estimates of a key factor – population. Quantitative data collected by national health institutions: Croatian Institute of Public Health, Croatian Health Insurance Institute and Ministry of Health, mainly produced mortality and morbidity statistics, which was of some use only for national health policy makers (26,27,28). In addition to its dubious credibility, national health statistics had other shortcomings: poor accessibility of indicators at the local level and non-inclusion of the opinion of the community (22).

Due to post-war conditions, scarce assets, and the need to determine the state of affairs and launch the action as soon as possible, the method of rapid appraisal (29,30) was chosen for the community health needs assessment and development of the strategic city health documents: the City Health Profile and City Action Plan for Health (31). The most popular and most used method in the Croatian cities is the method of Rapid Appraisal to Assess Community Health Needs (29,30). It was used in 9 cities between 1996 and 2004 (Pula, Metkovic, Rijeka, Karlovac, Varazdin, Zagreb, Split, Dubrovnik, Crikvenica). The advantages of this method in comparison with classical approaches to health assessment are as follows: it can be done quickly (in two months from the start), it does not take too much expert time and financial resources (approximately 6.500 EUR per city), it is participatory (representatives of different groups of citizens participate in the process, from needs identification to solution finding; includes representatives of city authorities, institutions and organizations as well as those from non-governmental and non-for-profit sector), sensitive (ability to reflect local particularities), valid (scientifically sound), actionoriented (as a product it gives short-term and long-term plan activity plan), and its achievements are sustainable (it establishes and facilitates co-operation among key stakeholders in the project via priority thematic groups).

Academic credibility of described needs assessment method was strengthened by the establishment of strict selection rules of participants and panellists and by the process of triangulation of both information sources (essays, observations and collected objective indicators from the system) and researchers (experts of three different backgrounds: public health, epidemiology and medical information science).

Qualitative analytical approach also was used in development of the model of rapid appraisal of effectiveness of public health interventions (32). A retrospective study of 44 successfully performed interventions in five cities – Liverpool (UK), Sandwell (UK), Vienna (Austria), Pula (Croatia) and Rijeka (Croatia) – identified the indicators of intervention effectiveness that could be used to asses the effect of an intervention in a short period of time (within a time frame of 1-5 years from the beginning of the intervention) by measuring several aspects of success. These are as follows:

- 1. Effect on political environment (macro-environment) assessment of the achieved degree of change in political environment;
- 2. Effect on a project user an individual, a group, a community, within the meaning of empowering users and influencing health;
- 3. Effect on a project manager an organization or institution, i.e., an association or group (microenvironment); and
- 4. Monitoring the effectiveness of the implementation process of an intervention.

The instrument happened to be more applicable for measuring the success of individual (population- or topic-targeted) interventions. In the evaluation of effectiveness of comprehensive years-long interventions, such as Healthy City or Healthy County, it is applied together with other evaluation instruments.

Concluding remarks

The job of public health professionals, including those in academic setting, is not only to investigate and understand the world; it is also to change it. This is why we, in Croatia put the emphasis on the development of applied (action) research by which the academic knowledge may be used for intensifying activities and development of local communities.

The introduction of participatory methods and consensus building techniques in the process of public health policy formulation in Croatia has brought much better understanding and improved collaboration among "policy stakeholders" - politicians, administration, public health professionals and community. Public health professionals are more responsive and committed to work with communities to support them to (re)generate local social capital. At the moment, Croatian Healthy Cities and Counties greatest achievement is that community participation is assured in all stages of planning and management of the resources for health at the local level.

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RECOMMENDED READINGS

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- 3. Social Determinants of Health: the Solid Facts. Second edition. http://www.euro.who.int/healthy-cities/publications/20040630_1