Do infrastructures impact on alcohol policy making?

Claudia König & Lidia Segura
Department of Health Promotion and Development, Faculty of Psychology, University of Bergen (UiB), Bergen, Norway and Department of Health, Government of Catalonia (GENCAT), Barcelona, Spain

ABSTRACT

Introduction The importance of building and strengthening effective infrastructures within the field of public health has increasingly been recognized. A wide variety of actors and structures can be identified for alcohol policy, including systems for policy development, monitoring, research and work-force development, but too little is known about the complex systems of infrastructure available across European countries and their impact on alcohol policy.

Objective This study is part of the Alcohol Measures for Public Health Research Alliance (AMPHORA) project, and aims to map existing infrastructures, but also to examine the relationship between infrastructures and alcohol policy change.

Methods A survey of alcohol policy infrastructure and infrastructure needs at the national level will be conducted using an updated and adapted questionnaire based on the Health Promotion (HP) Source Project tool. Case studies involving in-depth interviews will be conducted for a selection of countries. Data will be analysed descriptively, mapping alcohol policy infrastructure and identifying needs to reveal any relationship between infrastructure and alcohol policy.

Expected results This study can contribute to building the scientific knowledge base on this topic as well to policy development. First, the Alcohol Measures for Public Health Research Alliance will produce an extended map of alcohol policy infrastructures in a wide range of European countries. Secondly, the Alcohol Measures for Public Health Research Alliance will foster a better understanding and expand the knowledge base on the role and influence of infrastructure on alcohol policy and practice. Recommendations deriving from this study will identify the need for better utilization of existing infrastructures and for the development of new infrastructures, necessary to develop and implement effective alcohol policy from a public health perspective.

Keywords Alcohol policy, infrastructure, infrastructure mapping.

Correspondence to: Claudia König, University of Bergen, Department of Health Promotion and Development, Christiesgate 13, 5015 Bergen, Norway.
E-mail: claudia.konig@psyhp.uib.no
Submitted 13 April 2010; final version accepted 14 June 2010

THEORETICAL BASIS OF INFRASTRUCTURES IN PUBLIC HEALTH

The importance of building and strengthening infrastructures within the field of public health has increasingly been recognized internationally [1–6] and a call to build capacity has been raised, along with alcohol policy, as a specific public health topic [7–9]. Explanations for the enormous health gap between eastern and western European countries were found in the institutional infrastructure (as the ‘causes of the causes’) [7]. Public health law has been one of the leading contributors to the extension of life expectancy in the 20th century, but legal infrastructure supporting public health law in many areas is still underdeveloped and non-uniform [10]. Infrastructure generally is understood as the overall societal infrastructure and would include generic public health infrastructure, health care infrastructure as well as alcohol policy infrastructure, while the three last-mentioned concepts overlap. The investment in public health care infrastructures has been enormous in recent decades and has facilitated major achievements in health at the individual level. However, the investment in public health infrastructures, which would result in a broader impact in population health, has often been neglected. Now there is the challenge and the need to establish an appropriate public health infrastructure [11]. This concerns a variety of areas, given that an effective health promotion strategy must be intersectoral, involve several levels of policy-making and apply a wide range of measures [12].

The concept of infrastructure has been described in a number of ways. For Wise & Signal [2], organizational
and administrative structures may include national, regional and local governments in the health sectors as well as other sectors; the private sector, non-governmental organizations (NGOs) and community groups, which are involved in policy development, funding, programme design and delivery/service provision. The Health Promotion Glossary [13] refers to ‘Those human and material resources, organizational and administrative structures, policies, regulations and incentives which facilitate an organised health promotion response to public health issues and challenges’, while the Australian National Health and Medical Research Council [14] specifies: ‘Infrastructure refers to the systems for policy development, priority setting, monitoring and surveillance, research and evaluation, workforce development, and program delivery that direct and support action to promote, protect and maintain the health of the population.’ The International Union for Health Promotion and Education (IUHPE) [4] supports the classification of the latter definition, and describes infrastructure as ‘an interlacing framework of health promotion policy, training programmes, research capabilities, public education initiatives and risk management strategies’.

A combination of these different definitions will build the basis for this work in order to ensure the coverage of all important infrastructure elements, providing a guideline for alcohol policy infrastructure specifically. In our definition of infrastructure the following elements are included: policies, priorities, regulations and material resources that facilitate an organized health promotion response to public health issues as well as structures (systems and actors) that are involved in policy development, priority setting, monitoring and surveillance, research and evaluation, workforce development and programme delivery. This will thus include infrastructure for public health and infrastructure that represent a barrier to public health and will regard a wider range of organizations and sectors beyond a focus on the health sector only.

**INFRASTRUCTURES AND ALCOHOL POLICY**

The European Region has the highest alcohol consumption in the world, with an average of 11 litres of pure alcohol consumed by each adult aged above 15 years each year [15]. Alcohol consumption is associated with a great number of health and social harms as well as costs to society [9]. Relative to the harms and costs that alcohol causes, alcohol is not high on the global health agenda. In the majority of countries, a strengthened response (multi-level and multi-sectoral) is needed urgently, especially in developing infrastructures, to implement and monitor the effects of interventions that have proved to be effective (control availability, affordability, marketing of alcohol and drink-driving) [16]. Despite dramatic advances in building core infrastructure for alcohol policy in recent decades, there continues to be insufficient political will and investment by both private and public sources. Ensuring an adequately sized and enabled alcohol policy infrastructure is still a challenge. A case study on alcohol policies in four European countries shows challenges to implement comprehensive alcohol policy, possibly deriving from the lack of alcohol policy infrastructures such as alcohol policy strategies, intersectoral collaboration and NGOs [17] and points to the need of infrastructure addressing alcohol policy specifically. The role of infrastructures, as a prerequisite or a consequence of effective alcohol policy and practice, has not been examined or described in the literature. This paper is based on a review of the academic and grey literature. First, literature dealing with public health and alcohol policy infrastructure was identified using the databases ISI Web of Knowledge, PubMed, ProQuest, OvidSP and Google Scholar. Searches were undertaken combining the terms ‘infrastructure’, ‘alcohol policy’, ‘public health’ and ‘health promotion’ with other relevant keywords (e.g. ‘research’, ‘workforce’, etc.). Secondly, a search of all relevant publications by the World Health Organization (WHO) and reports by the European Commission (EC) was undertaken on the more specific area of ‘infrastructure’ and ‘alcohol policy’. In this paper, the term ‘alcohol policy’ is used to include both policy formulation and delivery.

There is some evidence that the existence or lack of infrastructure can be a strength or a barrier, respectively, for an effective implementation of alcohol policy. Moodie [1] identifies the vested interests of the political, business, medical and academic establishments as key barriers to health promotion and argues that those obstacles can sometimes be tackled by the effective utilization of existing infrastructures or the development of new infrastructures. A starting-point would be the identification of existing infrastructures, an understanding of how they operate and the skills required to manage them [1].

There exist instruments to identify infrastructure for health promotion and for specific public health topics such as alcohol policy. One such tool is the appraisal of Investment for Health (IFH), a service of the WHO Regional Office for Europe to its Member States that assesses a country’s health promotion effort and advises on the construction of a strategy [12]. Thereby, IFH helps to identify and strengthen assets important to health promotion including, among others, ‘strengthening of health promoting infrastructures and decision-making’ [3,12]. Infrastructures are, accordingly, one important priority and critical when investing in health.
A unique approach for the identification of infrastructures and other resources is the Health Promotion (HP) Source Project (http://www.hp-source.net) (HP-Source). HP-Source summarizes country-level health promotion policy, infrastructure and practice and collects data in nine categories: politics, policies and priorities; evaluation; monitoring and/or surveillance; knowledge development; implementation; information dissemination for public health professionals; programmes and strategies including laws and regulations; professional work-force; and funding [18,19]. Thereby, HP-Source will improve understanding of the range and variability of infrastructure across Europe; provide insight into what constitutes effective infrastructures, policy and practice; and improve understanding of infrastructural factors that influence the impact of health promotion [20].

The importance and impact of a variety of infrastructural components has also been discussed in the scientific literature on public health and alcohol policy. The following infrastructural components are discussed below: policies and priorities, laws and regulations, governmental bodies and departments, politicians, alcohol industry, civil society and ‘voice’, science and research, monitoring and surveillance, professional work-force and funding.

Policies, priorities and goals
A national policy document on alcohol is needed to describe priorities and guide action. National-level health goals and action plans related to alcohol can shape alcohol policies, set priorities, show commitment to new action and allocate resources. Goals and priorities should be based on epidemiological evidence, while the choice of strategies and interventions should be theory-based and evidence-based [11]. Global documents, such as the European Alcohol Action Plan [21] and the Framework for Alcohol Policy in the WHO European Region [8], although needing adjustment to national cultures and contexts, seek to guide national action. Nevertheless, many European Union (EU) countries do not yet have an alcohol action plan [9].

Laws and regulations
Laws and regulations established at national level often build the legislative basis related to alcohol [22]. Every country in Europe has implemented a number of alcohol-specific policies, with varying priorities and approaches across the countries [23-24]. Although there is no single policy formula [25], policies should be based on scientific evidence showing the effectiveness of various alcohol policy options [22].

The gap between science and policy and the diversity of policies is determined by a variety of influencing actors and an individual countries’ approach to resolve conflict-

Governmental bodies and departments and different levels
At national level, the responsibility of the government to develop and implement alcohol policy is usually split among several governmental departments and different levels of government involved in decision-making concerning alcoholic beverages [22,28,29]. Such departments might include those concerned with industry and trade, agriculture, employment, finance and health. Often there is a conflict of different interests and priorities among these sectors, as well as unequal power balance. Barriers to focus on alcohol issues from a public health perspective seem to include the economic and political values of free trade, unfettered marketing and open access to alcohol [30], governmental concerns about the contribution of alcohol to the economy and the possible political unpopularity of certain actions [26]. Historically, the lack of political support for public health issues and the reliance on financial matters have been identified as obstacles towards the implementation of alcohol control in the countries in transition [27,31,32].

From a public health perspective, there is a need for a regular means of coordination to ensure that alcohol-related problems are taken into account in policy decisions across different governmental sectors and levels of government (national, regional, local) [28] and between governmental bodies and other interest groups. Such a coordinating body, which is described as an ‘effective and permanent coordination machinery, such as a national alcohol council, comprising senior representatives of different ministries and other partners’ [7,9], is not in place in many EU countries [9].

Politicians
National politicians are representatives of governmental organizations who have the authority to regulate and influence the alcohol environment. Many politicians have particular interests in alcohol issues, which vary according to their professional position as well as their personal viewpoint. Individual contacts with outside government players such as industry or health groups may influence whether or not politicians are sympathetic towards specific alcohol policies and influence the forming of refining of policy proposals [29,33]. Because politicians are influential players in the policy arena, their political support for alcohol policies is crucial from a public health perspective.
The alcohol industry

The alcohol beverage industry is one of several pressure groups having a great interest in engaging in the policy arena in order to protect its commercial interest [22]. Pressure groups have unequal abilities to influence policy, and some are more powerful than others [29]. Alcohol industries usually have considerable economic, political and organizational power in the policy arena [29,33,34], especially in the countries of central and eastern Europe [32]. They often form lobbies, coalitions of groups, which are more powerful and show broad support for their common interests. Nevertheless, the interests are not necessarily convergent among all industrial sectors and concerning all policy options [34,35].

The stark discrepancy between research findings on effective alcohol policy options and existing alcohol policies is often attributed to the central, even dominant, role of commercial interests in the policy-making process [22,28,33,34]. This is a prevailing barrier to a public health-oriented alcohol policy agenda [36].

Civil society organizations and ‘voice’

A response to the dominant power of the alcohol industries comes from opposing pressure groups, which can be summarized as health lobbies. However, health groups usually have less political resources, access and financial power [33]. In many countries there is a lack of public health advocacy [22]. In several transition countries, the weak or non-existent civil society and public voice has been studied and is identified as a barrier to the reform of alcohol policy approaches [27,31,32,37].

Institutions that can support health promotion include independent, publicly funded institutions, non-governmental institutions, insurance industry programmes, issue-based organizations and networks and professional associations [1]. Greater ‘people power’ through the establishment of grassroots organizations and broad-based coalitions is suggested as a way to respond to the dominant role and power of the industry [36].

Science- and research-based organizations

Other important infrastructure elements are science and research systems, which build the knowledge base for the development of effective alcohol policies. Research can have a variety of functions, including problem identification, evaluation and analysis of programmes and policies, and providing recommendations on how to address a problem.

Conversely, there is a stark discrepancy between scientific evidence, for example on the effectiveness of alcohol policy measures, and policy options considered by the governments [28]. Babor [30] states that scientific research is perhaps the most important but least influential factor in alcohol policy. A US study reveals that research is most influential in agenda-setting and considering policy alternatives, less influential when amending a drafted law and least influential in decision-making [38].

Nevertheless, a good knowledge base is a prerequisite for alcohol policies and action [9]. This should include data on alcohol consumption and related harms and the effectiveness of alcohol policies and action, providing a basis for rational decision-making. The lack of such data, for example, can result in difficulties for health advocates arguing for comprehensive alcohol policies, as shown in eastern Europe and in most developing countries [22]. Therefore, adequate human, as well as institutional, capacity is a precondition of research efforts [9] and should be fostered.

Monitoring and surveillance systems

Monitoring and surveillance data build an important basis for all steps in policy development and action for example for priority setting. Alcohol monitoring and surveillance systems are needed to identify and make information available which should include: current and future trends and system performance; risk factors for harm; vulnerable groups; organizational or institutional challenges in implementing policies; governance; important contextual factors and actors; the roles and motivation of different actors; user and consumer preferences; opportunities and constraints for change; and events and reforms in other sectors with implications for alcohol policy [9]. Information systems are a key structure in knowledge dissemination [9] and must be available for a wide range of actors including researchers, health professionals, decision makers and advocates.

The professional work-force

The professional work-force engaged in alcohol policy and practice includes advocates and researchers besides practitioners (health care/service providers, health educators, health promotion/public health specialists, community workers, etc.). This demonstrates that work related to alcohol needs an appropriately trained workforce with a wide variety of knowledge and skills. Training needs for this range of professional groups cannot be summarized easily, but would include higher education as well as postgraduate training, offering opportunities to build and enhance knowledge and skills relevant for public health and alcohol policy.

Studies from post-communist countries criticize the lack of access to, understanding of and competence in modern epidemiology, public health, health promotion,
Evidence-based medicine, the application of social science research and a lack of public health education and training opportunities [7,11]. In addition, there is the demand for the development of media and policy advocacy skills and a better understanding of the alcohol industries in order to negotiate effectively with them [36]. These areas should be accounted for through developing or improving training opportunities.

**Funding basis**

Finally, effective alcohol policies cannot be developed and implemented without appropriate financial resources, which are critical for all aspects of alcohol policy. Sources for funding may include governmental budgets, incomes from voluntary organizations or earmarked taxes.

A predictable funding system should be set in place for organizations, programmes and human resources involved in reducing harm done by alcohol [9].

**METHODS TO BE USED IN THE ALCOHOL MEASURES FOR PUBLIC HEALTH RESEARCH ALLIANCE (AMPHORA) PROJECT**

This study is part of the AMPHORA project and aims to map existing infrastructures, but also to examine the relationship between infrastructures and achieving alcohol policy change or improving alcohol policy. For so doing, the study will describe existing infrastructures, identify needs and barriers for infrastructure, and monitor major changes in alcohol policy infrastructures in the last two decades in specific countries.

**Data collection**

Data collection will include three different strands: (i) to map existing infrastructures; (ii) to identify infrastructure needs and barriers; and (iii) to monitor major changes in infrastructures in the last 20 years (challenges, barriers and accomplishments).

The methodology used for infrastructure mapping in AMPHORA is based primarily on the tool HP-Source. An extensive data collection of alcohol policy infrastructure at national level will be conducted by carrying out a specific call using an updated and adapted questionnaire based on the HP-Source tool. The questionnaire is modified according to knowledge gained through literature searches, whose results have been discussed above and include the identification of crucial components of alcohol policy infrastructure and discussions on their impact on alcohol policy development and implementation. These elements include policy priority setting and governmental responsibilities; principle bodies responsible for implementation, for knowledge policy development, for evaluation, monitoring and surveillance activities and for information dissemination; institutions responsible for professional work-force development; as well as funding available.

The questionnaire will be completed by a national contact person in each of the study countries, who will be identified according to their expertise on alcohol policy and will include HP-Source contacts and WHO country counterparts. The survey link and instructions will be sent to each country contact person and only one completed questionnaire per country will be accepted. To clarify survey questions and to assist in maintaining consistency of interpretation of survey questions, participants will receive written instructions and a glossary of terms contained in the survey and defined by the research team. Each individual or set of state-level participants will take part in at least one conference call with members of the research team, in which instructions regarding the survey implementation and individual survey questions will be discussed.

To identify infrastructure needs and barriers, key informant semi-structured interviews will be conducted per country to gather data that would elucidate their perceived infrastructure needs. This will provide detailed information on existing infrastructure in different countries, their role and their influence on the issue, their interrelationship and trends in infrastructure development.

The survey will seek to answer four basic research questions, as follows.

- What infrastructures are in place at the country level?
- How do end-users of the infrastructures rate them?
- What are the alcohol policy infrastructure needs?
- What are the alcohol policy infrastructure barriers?

It will include an exhaustive list of infrastructures and appropriateness will be valued using a Likert-type scale (very low, low, moderate, high and very high). In addition, investment in infrastructures as evidenced by self-report of written budgets will be a complementary indicator. Several rounds of survey revisions will be conducted to incorporate the many areas of interest and remain faithful to the original ideas of the survey.

To track major changes in the last two decades, case studies will be conducted. Purposive sampling will be used to determine a country selection with different traditions and backgrounds. The selection criteria will include: geographical location, consumption trends, political background (both general and alcohol-specific) and high and low score in the infrastructure source. Our preliminary proposal is to carry out case studies on a national basis for France, Germany, Italy, Norway, Poland and the United Kingdom, and for Catalonia as a region. An expanded form of the tool used to interview key
Informants, described above, will be used and will include questions focused on describing major developments in alcohol policy infrastructures which have occurred in the last two decades and elucidating factors in successful building of infrastructures as well as challenges encountered in each country. Response validity will be tested by reviewing relevant written documentation to verify the correctness of assessment responses.

Data analysis

The study is focused on describing existing infrastructures, but also to examine the relationship between infrastructures and achieving alcohol policy change or improving alcohol policy. The methodology proposed will be used to answer the following questions.

- Do countries with better alcohol policy (measured with the scaling of alcohol policy instrument) have better infrastructures (measured through survey)?
- In countries with improving alcohol policy, what happened to infrastructures over time?
- In countries with decreasing consumption trends (e.g. Italy, France), what happened to infrastructures over time?
- In countries with increasing consumption trends (e.g. Ireland, United Kingdom, Finland) what happened to infrastructures over time?
- In countries where infrastructures (measured through survey) and other resources, i.e. infrastructure, policies have been identified above and include a variety of infrastructures across European countries. Although evidence points to strong links between infrastructures and policies and action, too little is known about the complex systems of infrastructure available across European countries and their impact on the implementation of alcohol policy.

The purpose of this study is to identify the organizational structures and barriers to effective alcohol policies have been identified above and include a variety of actors and systems. At present, there exist significant differences in infrastructures across European countries. Although evidence points to strong links between infrastructure elements and policies and action, too little is known about the complex systems of infrastructure available across European countries and their impact on the implementation of alcohol policy. The present study will be the first to examine this.

The purpose of this study is to identify the organizational structures and other resources, i.e. infrastructure needed for the successful implementation of public health measures to reduce the harm caused by alcohol (effective alcohol policies and action) as well as infrastructure components that constitute barriers. The aim is to establish a common framework on infrastructures for alcohol policy, describing exhaustively the main infrastructures and how they operate, collecting evidence on their utility and examining their impact on alcohol policy-making.

First, AMPHORA will reveal an extended map of alcohol policy infrastructures in a wide range of European countries. Even though the vital elements have been identified above, the systems for priority setting, policy development and implementation differ across countries in the same way as alcohol legislation and strategies vary.
Less knowledge exists about how these systems function in the policy arena in different countries [22]. We know that the policy arena, characterized by an interaction of many different interest groups, is an important structural component shaping the development and implementation of alcohol policies. In order to make the policymaking process more transparent, a first step must be to increase the knowledge of the systems and actors involved in these processes across Europe. This study will identify main national-level alcohol policies, laws and regulations, alcohol policy actors and systems as well as resources. The identification of infrastructures for alcohol policy might be a pre-requisite for further development.

Summarising the need, we require a map over the present state of infrastructure, policies and programmes for health promotion, to support more rational and efficient priority-setting and decision-making at all levels [4].

Secondly, AMPHORA will deepen the knowledge on existing infrastructure in different countries. The case studies will foster a better understanding and expand the knowledge base on the role and influence of infrastructure on alcohol policy and practice. An examination of changes and trends in infrastructure development will reveal relationships between infrastructure and alcohol policy.

Besides building the scientific knowledge base on this topic, the present study can contribute to policy development. Recommendations deriving from this study will identify areas where better utilization of existing infrastructures is needed and for development of new infrastructures, necessary to develop and implement effective alcohol policy from a public health perspective.

Declarations of interest
None declared.

Acknowledgements
The research leading to these results has received funding from the European Community’s Seventh Framework Programme (FP7/2007-13) under grant agreement n°223 059—Alcohol Measures for Public Health Research Alliance (AMPHORA). Partners in AMPHORA are: (1) coordination: Hospital Clinic de Barcelona (HCB), Spain; (2) Agenzia Regionale di Sanità della Toscana (ARS), Italy; (3) Alcohol & Health Research Unit, University of the West of England, UK; (4) Anderson, Consultant in Public Health, Spain; (5) Anton Proksch Institut (API), Austria; (6) Azienda Sanitaria Locale della Città di Milano (ASL Milano), Italy; (7) Budapesti Corvinus Egyetem (BCE), Hungary; (8) Central Institute of Mental Health (CIMH), Germany; (9) Centre for Applied Psychology, Social and Environmental Research (ZEUS), Germany; (10) Chemisches und Veterinä runtersuchungs- sant Karlsruhe (CVUAKA), Germany; (11) Dutch Institute for Alcohol Policy (STAP), the Netherlands; (12) Eclectica snc di Amici Silvia Ines, Beccaria Franca & C. (Eclectica), Italy; (13) European Centre for Social Welfare Policy and Research (ECV), Austria; (14) Generalitat de Cataluña (Gencat), Spain; (15) Institute of Psychiatry and Neurology (IPIN), Poland; (16) Institute of Psychiatry, King’s College London (KCL), UK; (17) Istituto Superiore di Sanità (ISS), Rome, Italy; (18) Inštitut za raziskave in razvoj (UTRIP), Slovenia; (19) IREFREA, Spain; (20) Liverpool John Moores University (LJMU), UK; (21) National Institute for Health and Welfare (THL), Finland; (22) Nordiskt välfärdscenter (NVC), Finland; (23) Norwegian Institute for Alcohol and Drug Research (SIRUS), Norway; (24) State Agency for Prevention of Alcohol-Related Problems (PARPA), Poland; (25) Stockholms Universitet (SU), Sweden; (26) Swiss Institute for the Prevention of Alcohol and Drug Problems (SIPA), Switzerland; (27) Technische Universität Dresden (TUD), Germany; (28) Trimbos-instituut (Trimbos), the Netherlands; (29) University of Bergen (UiB), Norway; (30) Universiteit Twente (UT), the Netherlands; (31) University Maastricht (UM), the Netherlands; and (32) University of York (UoY), UK.

References
7. Zatonski W. Closing the Health Gap in European Union. Warsaw: Cancer Epidemiology and Prevention Division, the Maria Sklodowska-Curie Memorial Cancer Center and Institute of Oncology; 2008.

© 2011 The Authors, Addiction © 2011 Society for the Study of Addiction
Addiction, 106 (Suppl. 1), 47–54


