CHAPTER 12. INFRASTRUCTURES. BUILDING A POLICY HOUSE

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Summary

The importance of building and strengthening effective infrastructures within the field of public health has increasingly been recognised. This study has aimed to map existing alcohol policy infrastructures in European countries, such as policies, priorities and goals, or laws and regulations and also to examine the relationship between the involvement of stakeholders and alcohol policy. Data were collected from 32 European countries from three different sources. The data were analysed descriptively and summarised through a web diagram for Europe. In addition, cross-sectional analyses examined the relationship between the involvement of stakeholders and alcohol policy. All countries have a number of laws and regulations addressing alcohol. The majority of European countries have a written national policy document, and a coordinating body for national alcohol policy is available. However, just over half the European countries have prepared a comprehensive report on the alcohol situation in their country. NGOs, academia/research organisations and health professionals/health services, as well as the alcohol industry, show in most countries high or medium involvement in public policy development. The results indicate that the involvement of academia in policy making is related to more strict and comprehensive alcohol policy, whilst the involvement of alcohol producers is related to weaker pricing policy. NGO involvement did not show any relationships.

Introduction

"The importance of building and strengthening infrastructures within the field of public health has increasingly been recognised internationally (Moodie et al. 2000; Wise & Signal 2000; Ziglio, Hagard, McMahon, et al. 2000; International Union for Health Promotion and Education (IUHPE) 2004; Wise 1998; Ziglio, Hagard & Griffiths 2000) and a call to build capacity has been raised, along with alcohol policy, as a specific public health topic (Zatonski 2008; World Health Organization 2006; Anderson & Baumberg 2006)" (König & Segura 2011).

For the purpose of this study the definition of infrastructures includes: policies, priorities, regulations and material resources that facilitate an organised 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 (König & Segura 2011). This thus takes account of infrastructure for public health as well as infrastructures that represent a barrier to public health, and will consider a wider range of organisations and sectors beyond a focus on the health sector only (König & Segura 2011).

More specifically, the following alcohol policy infrastructure elements have been taken into consideration: (1) Policies, priorities and goals, i.e. a national policy document on alcohol needed to set priorities, guide action and allocate resources; (2) laws and regulations that build a legislative basis related to alcohol and its implementation; (3) different governmental sectors at different levels involved in alcohol policy (multisectoral approach) and a coordinating body; (4) national politicians specialised in alcohol issues; (5) the alcohol industry engaging in alcohol policy as a pressure group; (6) civil society organisations and 'voice' as public health advocates; (7) science and research-based organisations building the knowledge

base for the development of effective alcohol policy; (8) the professional workforce engaged in alcohol policy and practice; (9) monitoring and surveillance systems to identify and make information available; and (10) funding basis needed to develop effective alcohol policy (König & Segura 2011). Specific infrastructures have been discussed as a strength or a barrier, respectively, for implementing effective alcohol policy (König & Segura 2011).

The aims of the study are to map existing alcohol policy infrastructures in European countries and carry out (1) a descriptive analysis of existing alcohol policy infrastructures throughout Europe, and (2) a cross-sectional analysis on the relationship between the involvement of stakeholders and alcohol policy.

What we did

Data from three different sources were collected for all 27 EU Member States and candidate countries as well as for Norway. Special emphasis was placed in avoiding duplications during data collection, in assuring the reasonable use of resources (of respondents as well as researchers) and thus promoting a high response rate.

Table 1. Data sources

Infrastructure elements	WHO survey	Amphora scaling	Amphora Questionnaire - map infrastructures
1. Policies, priorities and goals	Written national policy on alcohol including year, framework, multisectoral involvement and sectors represented		Name of written national policy on alcohol and link
2. Laws and regulations		**I Starting points** – law(s) regulating alcohol	
3. Governmental sectors at different levels and coordinating body	Coordination responsibility	**VI Public policy –** level of authority of alcohol administration	Name of coordinating entity
4. Politicians		**VI Public Policy –** level of public officials specialized in alcohol prevention	
5. The alcohol industry (stakeholder)	**Stakeholder's involvement** – community-based interventions/projects involving stakeholders – importance of the role played by stakeholders		Name of industry organizations and links
6. Civil society organizations and 'voice' (stakeholder)	**Stakeholder's involvement** – community-based interventions/projects involving stakeholders – importance of the role played by stakeholders		Name of NGOs and links
7. Science- and research-based organizations (stakeholder)	**Stakeholder's involvement** – importance of the role played by stakeholders		Name of science and research organizations, and links
8. The professional workforce (stakeholder)	**Stakeholder's involvement** – importance of the role played by stakeholders		Name of major training centres and links
9. Monitoring and surveillance systems			Name of systems and links
10. Funding basis		**VI. Public policy –** Public funds earmarked for alcohol prevention	Funds identifiable in national budget and in NGOs

Table 1 provides an overview of the information extracted about alcohol policy infrastructure from each data source. The most important data source to assess the status as at the end of 2010 was the European Survey on Alcohol and Health undertaken by the WHO during 2011 (Anderson et al 2012). The questionnaire of this survey was completed by WHO national counterparts, who are national experts on alcohol policy. It includes questions on alcohol policy infrastructure, mainly about written national policy and the involvement of stakeholders.

The second source was the Alcohol Policy Scale Measure developed by Karlsson et al. (2013) in the framework of the AMPHORA project, which also addresses alcohol policy infrastructure elements, mainly those on public policy.

In order to collect infrastructure data not covered by the two sources described above, a specific AMPHORA questionnaire was developed. National experts and members of the Alcohol Policy Network (www.alcoholpolicynetwork.eu) were requested to complete it.

The data were analysed descriptively and summarised through a web diagram for Europe. In addition, cross-sectional analyses examine the relationship between the involvement of stakeholders and alcohol policy.

What we found

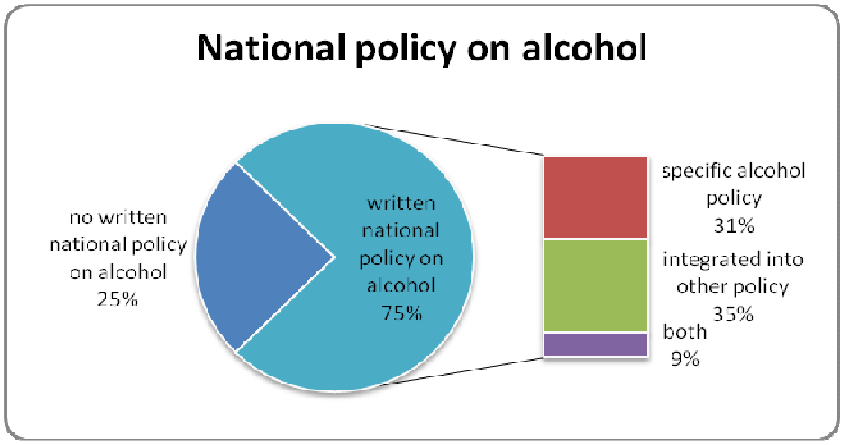
Thirty-two countries were included in the AMPHORA data collection on alcohol policy infrastructure. The results are presented according to a number of alcohol policy infrastructure elements.

Policies, priorities and goals

24 (75%) out of the 32 studied countries have a written national policy document. Eight countries (25%) do not have a written national document, although in two of them policies are available at sub-national level or a document is under development.

Ten (31%) out of the 24 countries that have a written national policy specifically address alcohol in this policy, while three (9%) of them have both a specific alcohol policy and an alcohol policy integrated into other topics. The other eleven countries (35%) address the topic of alcohol within other policies like substance abuse, mental health, non-communicable disease, general public health or other policies (see Figure 1).

Figure 1. National policy on alcohol



Laws and regulations

All European countries included in the study have laws and regulations concerning alcohol. Nine (28%) out of the 32 studied countries have a specific alcohol act, while 13 (41%) have a variety of laws addressing alcohol. Five countries (16%) have both a specific alcohol policy and other alcohol-related laws. Another five countries (16%) have no specific alcohol act and there is no information available about other alcohol-related laws.

Governmental sectors at different levels and coordinating body

Twenty-three (72%) of the 24 countries that have a national alcohol policy have a multi-sectoral approach, i.e. at least six to eight sectors are involved in alcohol policy. The following sectors are involved in most countries: health, education, road safety, the social sector, justice, law enforcement and the finance/taxation sector.

All countries that have a national alcohol policy, i.e. 24 (75%) out of 32 countries, also have a coordinating body that is responsible for the overall coordination of the development and monitoring of the national alcohol policy. The department of health is the responsible governmental sector in most (14 out of 24 countries). In three countries the responsibility lies within another sector, while the government divides the responsibility between several sectors in the remaining seven countries.

In ten (31%) out of 32 countries authorities deal with alcohol administration and supervision at the national level, while in just two countries (6%) it is dealt with at the sub-national level, and in 14 countries (44%) the responsibility is shared between the national and sub-national levels. Six countries (19%) do not have authorities that deal with alcohol administration and supervision at neither national nor sub-national level.

Politicians

Eleven (34%) of the studied countries have public officials specialised in alcohol prevention at the national level. In eleven countries (34%) there are specialists at both national and sub-national levels, while three countries (9%) have specialists at sub-national levels. The remaining seven countries (22%) do not have officials specialised in alcohol prevention at neither national nor sub-national level.

Stakeholders

Table 2 shows the number of European countries (N (%)) by the level of importance of the role played by different stakeholders at the national level in the following areas: prevention of underage drinking, targeted support (information, tools, counselling) for harmful and hazardous drinkers, prevention of drink-driving, and public policy development to reduce alcohol-related harm.

In addition, in most countries (29 (90%)) NGOs are very actively involved in community based interventions or projects, while there are interventions or projects involving young people and the civil society in 28 countries (88%). Economic operators, however, also have some involvement (13 countries (42%)) in community based interventions or projects.

Table 2. Importance of the role played by stakeholders in various areas

	Retailers and retail businesses	Alcohol manufacturers	Non-governmental organisations	Academia/ research organisations	Health professionals/ health services
Underage drinking					
High	8 (25%)	3 (9%)	11 (34%)	7 (22%)	14 (44%)
Medium	4 (13%)	8 (25%)	14 (44%)	13 (41%)	14 (44%)
Low	15 (47%)	16 (50%)	7 (22%)	10 (31%)	4 (13%)
No involvement	4 (13%)	4 (13%)	0	2 (6%)	0
Data not available	1 (3%)	1 (3%)	0	0	0
Targeted Support					
High	2 (6%)	0	13 (41%)	6 (19%)	18 (56%)
Medium	3 (9%)	7 (22%)	12 (38%)	8 (25%)	12 (38%)
Low	10 (31%)	13 (41%)	7 (22%)	12 (38%)	2 (6%)
No involvement	16 (50%)	11 (34%)	0	6 (19%)	0
Data not available	1 (3%)	1 (3%)	0	0	0
Drink driving					
High	3 (9%)	5 (16%)	11 (34%)	4 (13%)	10 (31%)
Medium	6 (19%)	9 (28%)	8 (25%)	8 (25%)	7 (22%)
Low	12 (38%)	10 (31%)	9 (28%)	15 (47%)	12 (38%)
No involvement	10 (31%)	7 (22%)	4 (13%)	4 (13%)	2 (6%)
Data not available	1 (3%)	1 (3%)	0	1 (3%)	1 (3%)
Public policy					
High	6 (19%)	5 (16%)	12 (38%)	9 (28%)	12 (38%)
Medium	6 (19%)	9 (28%)	16 (50%)	14 (44%)	15 (47%)
Low	11 (34%)	12 (38%)	3 (9%)	4 (13%)	4 (13%)
No involvement	8 (25%)	5 (16%)	1 (3%)	4 (13%)	0
Data not available	1 (3%)	1 (3%)	0	1 (3%)	1 (3%)

Monitoring and surveillance systems

A little more than half of the studied countries (18 – 56%) had prepared a comprehensive report on alcohol but the areas covered differ from country to country: drinking among adults (17 countries), drink-driving and alcohol-related traffic accidents (14), underage drinking (13), alcohol-related hospital admissions / discharge data (11), alcohol-attributable deaths (10), associations with socioeconomic variables (10), policy responses (10), availability of alcohol (7), geographical patterns of alcohol consumption(7), affordability of alcohol (6), alcohol-related public disorder and crime (6), association with other substance use (6), the general public's knowledge relating to alcohol (6), brief intervention in primary health care settings (5), drinking and pregnancy (4), expenditures on alcohol-related harm (4), and other topics (6).

Funding basis

Just about half the countries (15 – 47%) have public funds earmarked for alcohol prevention.

Infrastructures, stakeholders and alcohol consumption

Both Karlsson et al (2012) and Anderson (2013, in press) have demonstrated a relationship between the strictness and comprehensiveness of formal alcohol policies and levels of per capita alcohol consumption across European countries, with evidence that once a certain threshold of strictness and comprehensiveness is reached, the greater the strictness and comprehensiveness, the lower the level of alcohol consumption.

In this section we consider whether or not stakeholder involvement in public policy impacts on the strictness and comprehensiveness of alcohol policy. Figure 2 shows the numbers of countries in which various stakeholders had no, low, medium or high involvement in alcohol policy development as judged by the respondents to the WHO European Survey on Alcohol and Health (Anderson et al 2012)[9].

Figure 2. Number of countries in which various stakeholders had no, low, medium or high involvement in alcohol policy development, as judged by the respondents to the WHO European Survey on Alcohol and Health (Anderson et al 2012).

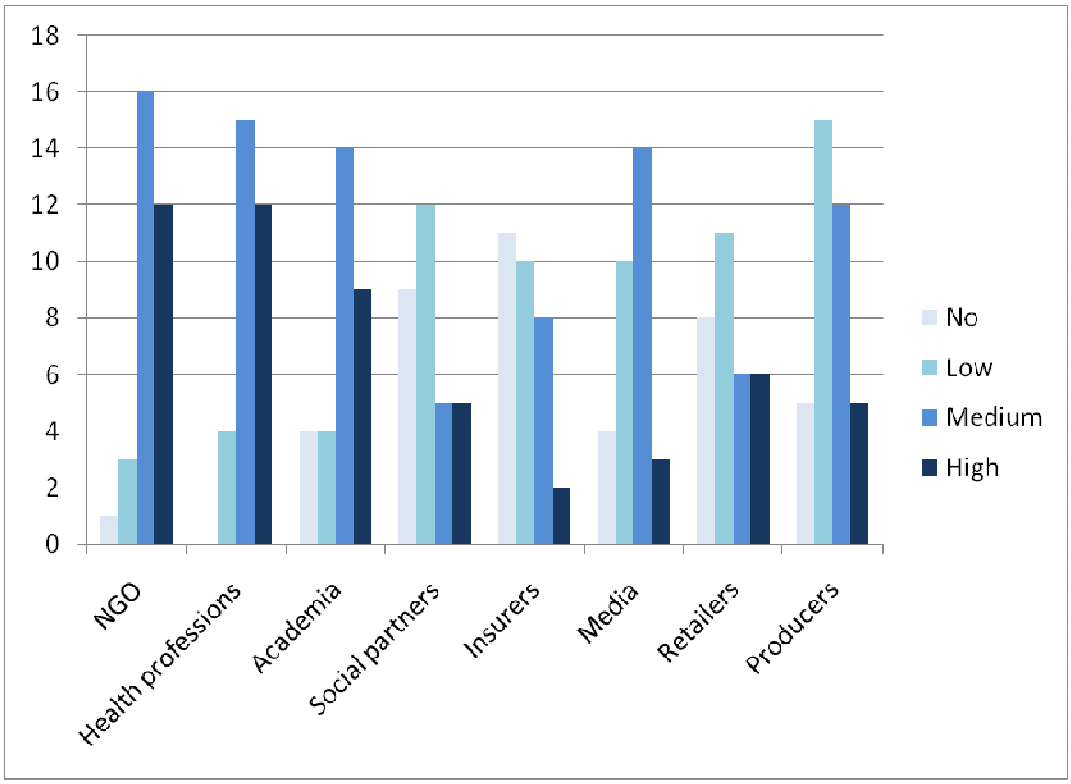
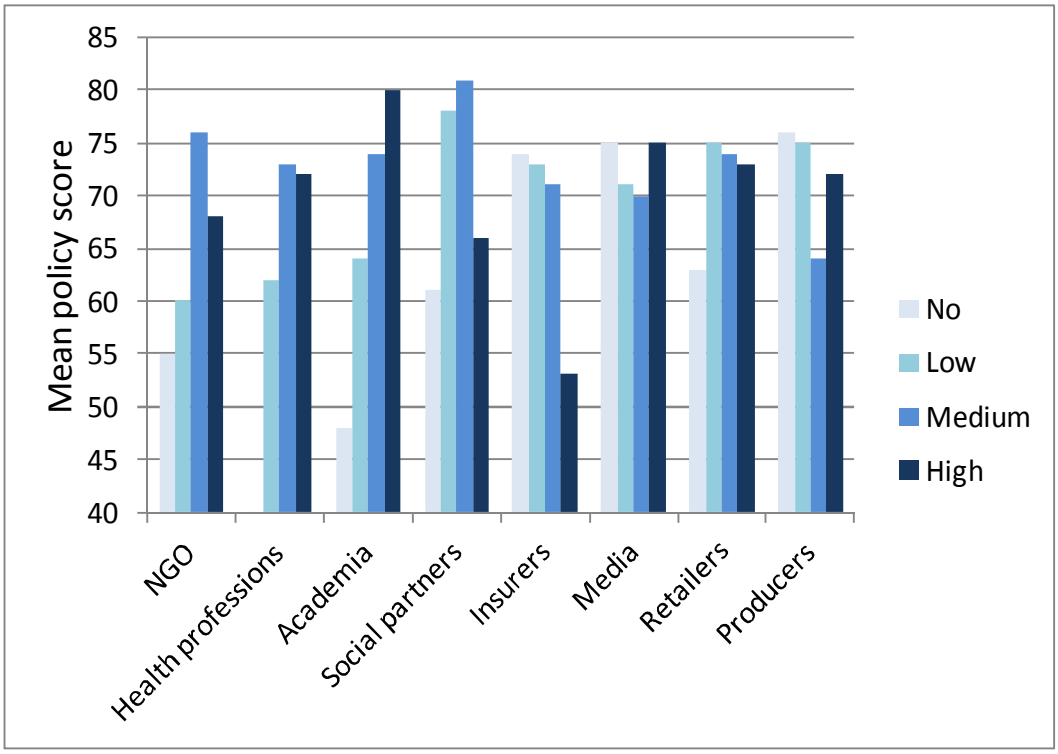


Figure 3 shows the mean scores for the strictness and comprehensiveness of alcohol policy derived from Karlsson et al (2012) by level of stakeholder involvement in alcohol policy development (no, low, medium or high). This figure has been constructed by grouping together the countries according to the level of involvement of each type of stakeholder, and then calculating the average policy score (on the strictness and comprehensiveness of alcohol policy scale) of each group of countries. Therefore, for example, in countries with low NGO

9 The 32 countries for which data were available were: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, FYRoM, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

involvement in alcohol policy development, the mean score on the strictness and comprehensiveness scale is 60 points out of a possible 160.

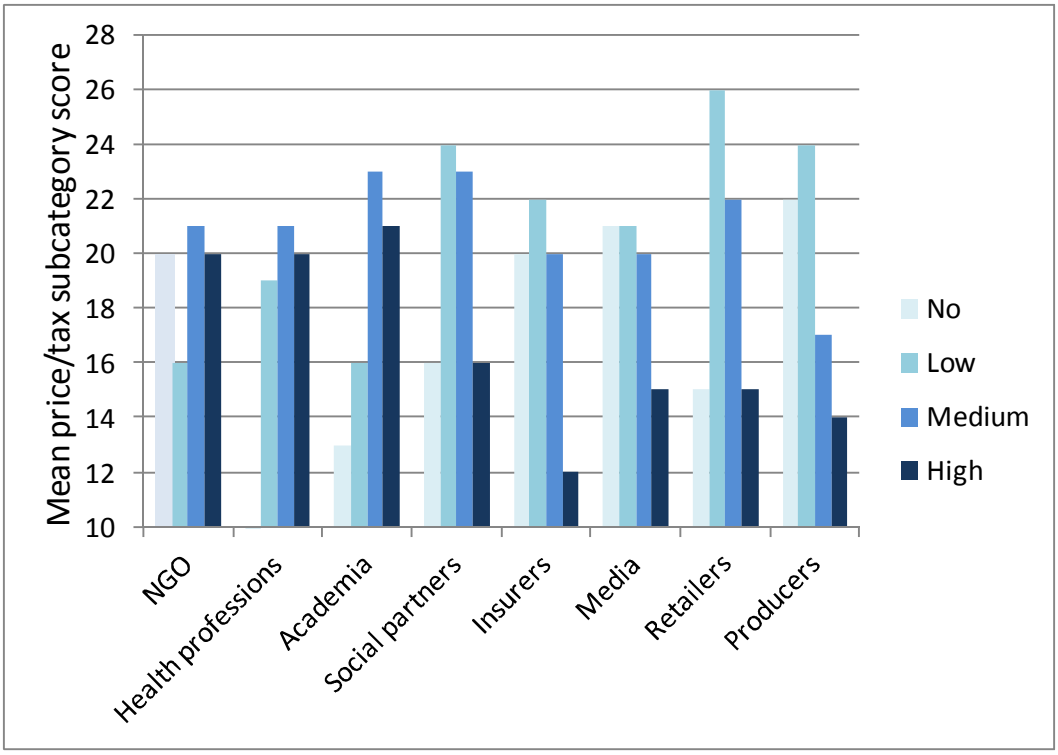
Figure 3. Mean scores for the strictness and comprehensiveness of alcohol policy by level of stakeholder involvement in alcohol policy development (no, low, medium or high). [Bottom of y-axis truncated at a score of 40].



The only group with a significant relationship was academia, where increased involvement was associated with more strict and comprehensive policies (anova test for linear relationship, $F=5.52$, $p<0.05$). When a regression analysis was undertaken with all stakeholders entered into the model, the strictness and comprehensiveness of alcohol policy being the dependent variable, the only significant relationship was for academia, where increased involvement was associated with more strict and comprehensive policies (Beta=0.77, $p<0.01$). Increased involvement of producer companies was associated with less strict and comprehensive policies, but the relationship was not significant (Beta=-0.49, $p=0.063$).

We have seen that only one type of stakeholder correlates significantly with the global alcohol policy scale created by Karlsson et al (see Karlsson et al 2012). When we look separately at each of the subcategories that form this scale, we find that the only subcategory that suggested a relationship was the price and tax subcategory (see Figure 4). The relationship with academia was not significant (anova test for linearity, $f=2.1$, $p=0.16$), and the relationship with alcohol producers failed to reach statistical significance (anova test for linearity, $f=3.6$, $p=0.069$). However, when repeating the regression analysis above once all stakeholders had been entered into the model, being the strictness and comprehensiveness of alcohol pricing and tax policy the dependent variable, increased involvement of academia was associated with more strict and comprehensive alcohol pricing and tax policies (Beta=0.604, $p<0.05$), while increased involvement of producer companies was associated with less strict and comprehensive alcohol pricing and tax policy (Beta=-0.73, $p=<0.01$).

Figure 4. Mean scores for the strictness and comprehensiveness of alcohol pricing and tax policy by level of stakeholder involvement in alcohol policy development (no, low, medium or high). [Bottom of y-axis truncated at a score of 10].



What does this mean?

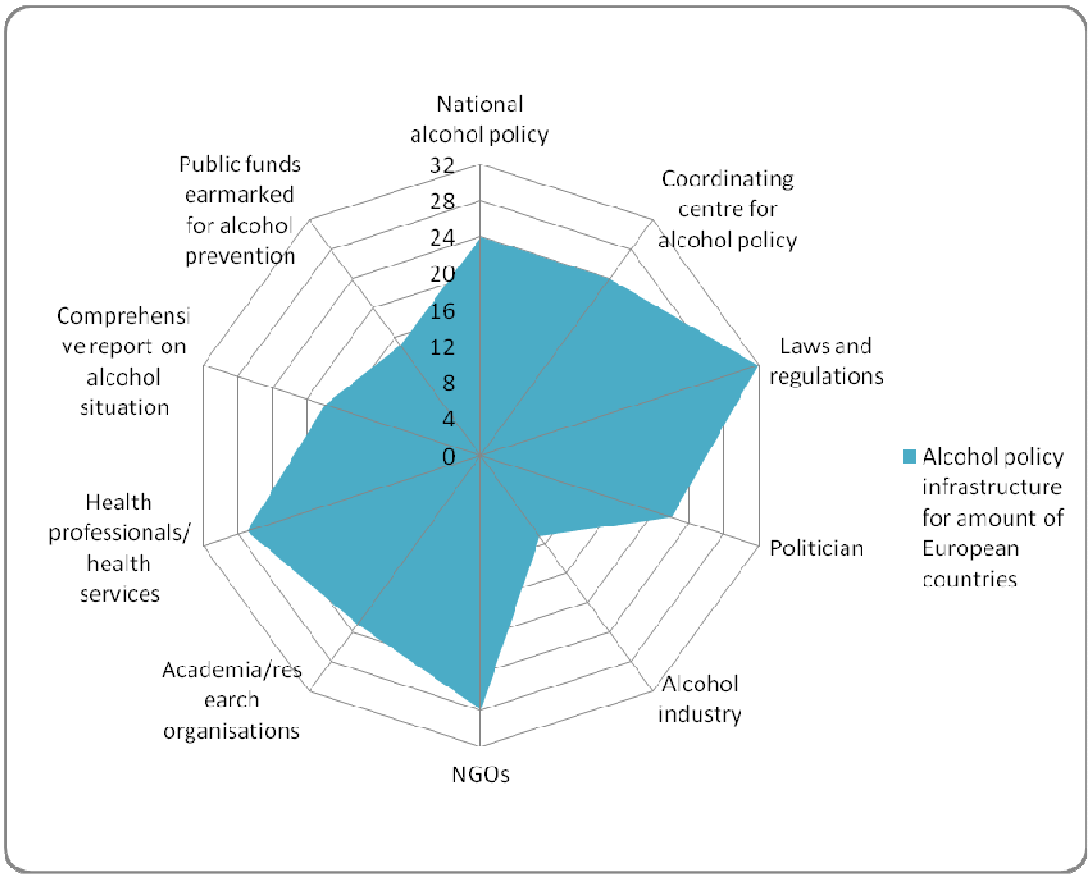
The results from the descriptive analysis show the presence or absence of a variety of alcohol policy infrastructure elements in European countries. This summary can serve as a basis for further analysis on areas with potential for further developments towards a sound alcohol policy infrastructure.

(1) Spider web

The spider web graph below intends to present European alcohol policy infrastructure supporting alcohol policy developments from a public health perspective just in one glance. It contains all infrastructure elements that were included in the study; for each of these elements, the number of European countries that have that particular kind of infrastructure is coloured in blue.

The assessment of the categories 'national alcohol policy', 'coordinating centre for alcohol policy', 'laws and regulations', 'politicians', 'comprehensive report on alcohol situation' and 'public funds earmarked for alcohol prevention' examines the presence or absence of that infrastructure element for all countries. The categories 'NGO', 'academia' and 'workforce' show countries with high and medium involvement of those stakeholders in public policy. The category 'alcohol industry', in contrast, shows the amount of countries where both manufacturers and producers/retailers have low or no involvement in public policy.

Figure 5. European alcohol policy infrastructure



All countries have a number of laws and regulations addressing alcohol. This might be a comprehensive alcohol act or a number of laws and regulations addressing alcohol besides other issues. More essentially though, the majority of European countries have a written national policy document, which can contribute to set priorities, show commitment and allocate resources and shape a country's alcohol policy. Most countries have a multisectoral approach to alcohol policy, i.e. a number of different departments are involved. However, typically there is a coordinating body available that is responsible for the overall coordination of the development and monitoring of the national alcohol policy. Also, the majority of countries have public officials specialised in alcohol prevention, which could contribute to emphasise the importance of and draw attention to alcohol-related issues.

Only about half the European countries, however, have prepared a comprehensive report on the alcohol situation in their country despite of the importance of monitoring and surveillance data as, for example, a basis for priority setting and policy development.

NGOs, academia/research organisations and health professionals/health services in most countries show high or medium involvement in public policy. This could be a contributing factor to the development of effective alcohol policy. On the other hand, the alcohol industries show their involvement in public policy, although they might be pursuing different interests and possibly counteract the implementation of effective alcohol policy (see relationship analysis).

(2) Relationship analysis

This study might also be the starting point to increase the understanding of the relationship between infrastructure and effective alcohol policy. Other work has shown relationships between the strength of alcohol policy and per capita consumption, once a certain policy threshold has been crossed. Analyses presented in this chapter indicate that the involvement of academia in policy making is related to more strict and comprehensive alcohol policy, whilst the involvement of alcohol producers is related to weaker pricing policy. NGO involvement did not show any relationships.

Take home messages

1. The exercise of conceptualizing and mapping alcohol policy infrastructure in Europe is complex but important to identify the elements that have a major impact on alcohol policy and strengthen them.

2. Laws and regulations, written national policy documents, and coordinating centres for alcohol policy are the most widespread infrastructures. However, efforts have to be done to extend comprehensive reports on the alcohol situation and to establish public funds earmarked for alcohol prevention in all countries.

3. The impact of the involvement of different stakeholders in alcohol policy is diverse. Whereas academia involvement seems to facilitate stricter and comprehensive alcohol policy, the involvement of alcohol producers could be a barrier, at least, to a stronger pricing policy, while NGO involvement did not show any relationship.

4. Future efforts should be invested in overcoming the difficulties encountered in operationalizing some of the infrastructure elements to be able to use them in a more analytic and inferential way.

Conflict of Interest Statement

Claudia Kønig Lidia Segura and Peter Anderson have no conflicts of interest to declare.

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