The Icelandic model; is the hype justified?

Disclaimer

EUSPR position papers are intentionally not scientific papers. For an easy and accessible reading of this paper, references to scientific articles have been avoided and some complex issues omitted or simplified. All literature, references, analyses and information about alternative models for making local assessment of life challenges for young people, are available from the EUSPR research community and in particular from the contributors to this position paper.

For the readers interested in the science behind this position paper, we are about to publish a scientific paper, which can be found on the EUSPR's website once it is published.

Act ethically: use resources wisely, apply science critically, and communicate finding cautiously.

Prevention workers and policy makers are eager to get started with and purchase the Icelandic model, a purportedly new way to prevent alcohol and drug use among young people. Considerable salesmanship has accompanied this model, and considering this hype, the European Society for Prevention Research (EUSPR) is concerned with its broad (commercial) dissemination, especially as evidence concerning the implemented measures is limited. We do understand the appeal of this environmental approach to a broad range of decision makers and share the interest in this model (a combination of normative and incentive prevention components) because of its supposed relation to the drastic decline of substance use among Icelandic youth in recent years.

Yet, we argue that one cannot readily adopt this intervention and implant it in countries that do not have Iceland's particular and specific characteristics. Even if it seems an attractive intervention, for the intervention to succeed, as well as for the efficient use of public funds and adherence to ethical considerations, there are a number of important issues to be considered.

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The key elements of the Icelandic model are:

- Overall, a strong alcohol policy, e.g. curtailing assess to alcohol (including minimum age to purchase alcohol) and banning advertisement. In the European Alcohol Control Score, Iceland has one of the highest scores in Europe.
- Promotion of parental monitoring and family dinners. Parents are encouraged to spend more time with their offspring and to know where they are and with whom.
- A committed education and youth policy overall, with leisure vouchers (for e.g. sports or music clubs) as an identifiable element; the focus is on **supervised** leisure time.
- Curfew hours for minors (22:00 in winter, midnight in summer).
- Making a local diagnosis of problems with youth surveys.
- Coalitions of local stakeholders in the identification of important factors and activities to be implemented. This element is a key component of several other well published and researched prevention strategies.
- Overall strong social norms and cohesion in the society, which facilitate implementing curfew hours and promoting changes in parental behaviour.
- No investment in scare or warning campaigns, so that scarce prevention funds are not diverted to ineffective resources.

All these elements are well established in prevention research and practice. The innovative aspect of the Icelandic model lies in the consistent and consequent application of these evidence-based principles together in a comprehensive environmental approach, in a country in a particularly good position to do so.

What are the strengths

The Icelandic model is an environmental approach, in which parents and organised leisure time activities, together with increasing normative pressure, play a central role in seeking to reduce alcohol and drug consumption among young people. The original model, as it has been applied in Iceland has a number of strengths:

First, research shows that it is better to target **multiple stakeholders** in an intervention, such as parents AND youth. Parents, youth and policymakers are involved in both the development and implementation of the Icelandic model. This approach is still relatively rare in Europe when it comes to curbing substance use among young people.

Second, research shows that the availability of positive, well supervised and meaningful leisure activities are protective for alcohol and cannabis use among young people. Youth in this developmental period need a place to meet their peers but often meet in unsupervised public spaces or at home, which is why meaningful alternative and monitored activities and spaces are needed.

Offering **supervised leisure activities** to youth may seem obvious, yet is not often used in preventive interventions. However, the participation in (particularly team) sports, by itself, can in fact increase alcohol consumption.

Third, a **bottom-up approach** allowing stakeholders to participate in the development of an intervention is better than a top-down approach where the intervention is instructed by others. Specifically, the involvement of different stakeholders can induce more public support, better matching of the intervention to the needs of the target group and a higher quality of implementation. Subsequently, the chances for the intervention to succeed are enlarged and public money is spent more efficiently.

Fourth, **recent data** on alcohol consumption, leisure time and the role of parents of youth in a specific context are the foundation of this intervention. Based on this data prevention workers and policy makers will better understand risk and protective factors that influence substance use in a particular area. The components of the intervention are selected and implemented according to the analysis of this data. It is fairly rare that intervention strategies are implemented shortly after scientific data are collected, even though – as demonstrated in other prevention strategies (i.e. Communities That Care) – it is a valuable way to match the intervention to the needs in specific contexts and populations.

> **… parental monitoring and opportunity to engage in risk behaviours have found to be important mechanisms**

Fifth, we know that the targeted factors of the Icelandic model, i.e. parental monitoring and reduced opportunity for youth to engage in risk behaviours, have been found in many studies to be important **mechanisms** in preventing or reducing the use of substances. Moreover, targeting these factors within a broader context of discouraging early alcohol use is even more effective. The combination of prevention efforts framed in an alcohol policy that restricts the accessibility and acceptance of alcohol, as is present in Iceland, is correlated to lower drinking rates among youth in several studies. In particular, parental monitoring is a well-known effective prevention component. In line with this, family dinners together have a protective effect against antisocial behaviour in general and are a logistically easy way for parents to spend more time with their children. Media strategies that target parents only to promote parental warmth and monitoring and family dinners belong to the relatively few evidence-based forms of using media in prevention.

Sixth, the **curfew hours** are an important component since they reduce the opportunity for harm by reducing the exposure of young people to the environments, situations and crowds that become exponentially more risky the longer the night progresses. In Iceland, the Nordic states and a few other countries in Europe, existing curfew hours are perceived as a neutral normative element for young people, and certainly not as repression: it is only logical, it seems, that under 18 year olds don't drive a car, can't buy alcohol (in theory), can't go to jail, can't sign a binding contract … and can't be on the street after a certain hour. Also, in Germany, underage youth need to carry a specific form signed by their parents or an adult caretaker who takes responsibility over the under-aged after a certain hour in the evening.

The strengths outlined above are well-known principles of effective interventions to prevent or reduce alcohol and substance misuse, and thus most likely also contributed to the effects of the Icelandic model.

We are delighted with the fact that the popularity of the Icelandic model in the international lay press has hugely advertised and promoted the concept of environmental prevention. Thanks to this, prevention stakeholders increasingly understand how important it is to:

a) consider in prevention the **automatic, collective and non-conscious determinants** of human behaviour (such as incentives, opportunities and social norms) as opposed to only targeting individual decision making or skills.
b) create **integrated local strategies at municipal/county level** (i.e. managing opportunities and incentives for everyone's behaviour) and not merely programmes that target individuals or collectives (e.g., schools or families).

This is a major contribution to the cause of advancing evidence-based prevention principles within broader lay and policy-maker audiences. We therefore applaud the Icelandic Model winning the ISSUP award for the most promising prevention intervention in 2019.

Nonetheless, we suggest that decision makers contain their enthusiasm for the seemingly obvious success of the model, while maintaining their willingness to invest in rigorous evaluation strategies if they choose to implement the model by considering the following points.

Precisely with the following considerations in mind, the Review Board of the EMCDDA's Xchange registry has rated the Icelandic Model as "additional studies recommended". This rating means that – while considering the available and eligible research papers – an intervention has no harmful effects, and all effects are in the intended direction, but that the quality and amount of research does not provide a high level of trust in the robustness of the findings in other contexts. Dissemination is therefore only recommended if accompanied by good evaluation studies. The following reasons explain this position.

What are the challenges?

The legal context: the crucial practical challenge of transferability

The implementation of the most important components of the Icelandic model (alcohol policy and parental involvement by e.g. curfew hours) depend upon changing laws or delegating regulation power to local authorities in each count(r)y where the model is to be applied.

> **… there is no clear description of the menu of interventions or the components to be implemented**

To develop a strong alcohol policy with curfew hours requires legislative action, which can take several years in most countries and can hardly be influenced by the promoters of the Icelandic model. It is hard to understand how the model can be marketed to countries or regions without having guarantees that all its components can actually be implemented. As the consultancy contracts of the Icelandic Model do not account for this limitation, the usability of the crucial components of the product being offered, is low. The model offers only vague statements that components will be selected after the baseline assessment; hence **there is no clear description of the menu of interventions or the components to be implemented. This means that clients will have no idea of what they are "buying".**

The social context: a theory challenge to transferability

In many ways Iceland is comparable to some European countries, yet not all. For example, Iceland is a country with the lowest **population density** in Europe. It is a fairly secluded island with the lowest number of inhabitants in Europe and low social inequalities. This relates, amongst other geographic and population characteristics, to social relations: perceived **quality of support** from the social network, and social capital: i.e. trust in others. It seems therefore more feasible and acceptable in Iceland than in most other countries to increase social control and support (by parents in particular) and to engage people in bottom-up approaches: these have not really been carried out in a number of countries where the model has been tried.

Considering these differences, one cannot simply adopt the Icelandic model in other contexts, as risk and protective factors, such as parental influence, neighbourhood attachment and overall community organisation differ across national contexts. Knowledge about the mechanisms contributing to the reductions in alcohol use is imperative to understand *how* the intervention has achieved its (additional) effects.

Declining prevalence of alcohol use across Europe: a challenge to validity.

Icelandic researchers indicate that the number of 15-16 year olds who have ever drunk alcohol has decreased from 77% in 1995 when the Icelandic model was introduced, to 35% in 2015. This is an impressive decrease, but it must be matched to the historical context and secular trends. During the same period, substantial reductions in the initiation of alcohol use were observed for e.g. Ireland, Finland, Norway and Sweden, and even in England, 11-15 year-olds who reported 'ever drank' alcohol fell from 62% in 1996) to 38% in 2014. Moreover, at the European level, the steepest declines are observed for adolescents aged 11-14. In 2010, prevalence rates of weekly drinking and drunkenness among 11 and 13 year olds in Iceland were comparable to several other countries such as Portugal, Germany and the Netherlands.

Taking into account the decline in drunkenness, the initiation of and weekly alcohol use among youth across Europe, the decline in drinking among Icelandic youth cannot exclusively be attributed to the Icelandic model. This brings us to the next limitation; a lack of hard scientific evidence.

Challenge to validity: limited hard scientific evidence

The question stated on the website of the Icelandic model (Youth in Europe, https://planetyouth.org/about/youth-in-europe/), i.e. *'How did Iceland go from being among the highest in substance use of adolescents in Europe to the lowest in 15 years?'* cannot be answered based on the available scientific evidence and this is corroborated by the authors themselves when stating that they "were unable to establish a statistical linkage between substance use and the primary prevention variables" (Kristjansson et al., 2016).

As was described, the decline in alcohol consumption in Iceland over the past 20 years is comparable to the **decline observed in several other European countries**. This is called a "period effect": it is most likely that alcohol use would have declined in Iceland over this period without any intervention. The decrease in drinking among Icelandic youth cannot with certainty be attributed to the intervention, since wider changes in teenage culture and behaviour have occurred all over Europe.

Moreover, due to a lack of insight into the actual content of the model and its components, we do not really know what is being done and how it relates (i.e. dosage) to potential changes in parenting strategies or participation in sports activities. This brings us to the point of our support to an **open science framework** and how it relates to the widespread implementation of the Icelandic model.

Centralised data collection and storage: a challenge for the open science framework

One can only make use of the Icelandic model by joining the Icelandic Monitoring Centre, which includes instruments that are different from the most commonly used national instruments, such as in the international Health Behavior in School Children (HBSC) study. Additionally, the implementation of the Icelandic intervention implies the use of a mandatory set of commercial research instruments, which leads to a conflict of interest. That is, the ICRA centre is in charge of the data which can have the appearance of having more benefit by making (only) positive results public so that people are more likely to wanting to work with (and pay for) the Icelandic model.

> **… implementation of the Icelandic intervention implies the use of a mandatory set of commercial research instruments**

This conflict of interest is further fed by the fact that all collected data are owned and analysed by the Iceland Monitoring Centre.

The reality in other countries: a challenge for its application in real life settings elsewhere

We do understand the attractiveness of the Icelandic model, and therefore suggest that policy makers and prevention workers interested in adopting it take into account the following issues. When applying for the use of the Icelandic model, the commercial offer to countries includes above all a local diagnosis of the risk- and protective factors, but it does not yet describe a clearly well-defined and well-explained menu of intervention components and how they can be implemented. Furthermore, there seems to be considerable freedom about which components must be implemented to earn the label “Icelandic model”. Anecdotal evidence suggests that current interpretations of the model allow authoritarian decision makers to skip all incentive elements (e.g. leisure time vouchers for all youth) and focus only on curfew hours and parental control, whereas in other, European implementations the curfew hours and promotion of parenting monitoring have silently been dropped because they were considered a cultural no-go.

Lastly, until now, there are neither implementation nor evaluation reports published for the countries where the model has purportedly been implemented. Moreover, in several of these countries (e.g. Spain, USA, Romania, Ireland) the implementations are limited to one or a few communities, or have only recently begun. This collides with the impression given that the model could be or was already "successfully implemented" in many countries. In Chile, for example, only baseline diagnostic data are currently available (February 2020), yet promoters of the model in Latin America have already spread news about its "effectiveness" in this country.

Good branding and media coverage, but not unique: a challenge to the commercial model.

The Icelandic Model charges up to 4000€ in the example of Chile to undertake a local diagnosis in each local community. Based on this diagnosis, the centre produces rather basic and descriptive data in return, falling short of a detailed analysis that would allow for an individualised prevention strategy for each community. Other, publicly available, reliable and validated Youth Surveys are available to assess risk and protective factors and behavioural outcomes. The range of measured risk and protective factors is often broader in these alternative approaches as compared to the ICRA's questionnaire.

Other models for planning and implementing preventive actions to reduce substance use also combine the top-down elements (key leader group) and bottom-up elements (community board with citizen participation), but they describe very clearly their processes of participatory decision-making. They also offer a transparent "menu" of evidence-based interventions from which to choose (e.g. Blueprints in the U.S., Green List in Germany). This is not the case for the Icelandic model.

Concluding remarks

The environmental approach of the Icelandic model targeting the reduction of substance use among youth may have the potential to be generalised to other countries, but only if the local contextual characteristics and context-specific implementation data are registered and considered so that they can be used in the continuous re-adaptation of the intervention. In conclusion, the Icelandic model seems promising, but when implementing it in other contexts a critical review of the above mentioned issues is warranted.

The adoption of the **research framework** of the Icelandic model, such as implementing the local youth survey, is costly while its content is basic, descriptive and the research infrastructure does insufficiently allow for community control over the own data. Additionally, the compatibility with existing survey questionnaires used in other countries, is not considered in the research framework.

There are other, less exclusive, and more accessible tools available, allowing for between and within country comparisons and deeper analysis that in turn allow for understanding *how* (as opposed to only *if*) an intervention works to reduce alcohol use.

The **intervention** components of the Icelandic Model rely on well-known prevention principles which may, however, be quite challenging to implement without the necessary macro strategies, such as a strong and consequent national alcohol policy, prevailing public narratives and opinions on alcohol use (i.e. social control), and a committed youth and education system. The prerequisites of reducing (the initiation of) alcohol use among youth are a clear science-based logic model explaining how each of the intervention components contributes to preventive effects in concert with transparent implementation tools and research support. This is threefold set of prerequisites is well-accepted and common in scientific research and should be part of the package for clients.

We invite the authors/developers of the Icelandic model to engage in a scientific debate with the EUSPR and present the logic models, intervention components and research methods as well as findings to the European prevention research community.

In the marketing of interventions in general, and the Icelandic model in particular, we instil the hope that lay media will be sensitive to report on promising interventions, yet also maintain a critical journalistic eye on what is and what is not being reported, and by whom.

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