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Title: Strong effectiveness evidence: but what else do policymakers need?

50 words: Wicki et al.'s high-quality controlled study makes a strong case that local off-licence restrictions in Switzerland led to reduced hospitalizations for alcohol intoxication. Further systems-informed study of such policy changes might add valuable evidence on outcomes such as behaviour, public opinion and economic impact for different stakeholders.

Wicki et al. (1) make a strong case that restrictions on the temporal availability of alcohol, even where not applying to all alcohol types, and only to off-premises sales, may reduce heavy drinking and alcohol-related harm. The study explores bans on evening/night-time alcohol sales in Lausanne, and later in the whole canton of Vaud, introduced by local politicians. The authors have made a strong case because their study employs a high-quality controlled interrupted time series design (2), and has been well considered and executed. Importantly, the quantitative analyses directly relate to their prior hypotheses, although not pre-registered as they acknowledge. Further, the study has used data for public hospitals in a whole country (Switzerland) which limits the risk of some selection biases, and this coupled with the high quality design, is an excellent example of producing robust, policy-relevant evidence on public health interventions exploiting data sources and study designs that are much cheaper than running (cluster-) randomised trials.

The authors note that hospitalisations for alcohol intoxication occurred more frequently in Vaud than in other Swiss cantons and suggest that may have been the motivation for the later policy change. If that was indeed the motivation, it is likely that the current study will provide very useful evidence to support the maintenance of the policy. Furthermore, the evidence can be used in debates elsewhere to support greater restrictions on off-premises availability and will contribute to future systematic reviews. Nonetheless, whilst the finding of reduced harm in this study is important, it may well not be sufficient to ensure the continuation of the policy, or its introduction elsewhere. Policymakers, and perhaps even more so local policymakers, may question the value of scientific evidence, particularly that generated in other locations (3,4) and these doubts can be exploited by alcohol industry actors (5). Furthermore such evidence competes for policymaker attention with many sources of expertise, public opinion, tacit knowledge and grey literature on which they legitimately draw to make decisions (6). It would be interesting to understand in this case, whether the introduction of the restrictions was influenced by earlier evidence on the effectiveness of such regulation or other sources, what the politicians hoped to achieve and how they expected the restrictions to work.

Given the common tension between the desire to maximise economic activity (7,8), whilst reducing or at least not increasing alcohol-related harms, further evidence on the impact of these changes would be valuable. There are important questions to ask around what the economic costs and benefits were for different stakeholders in the market: how were off-licence premises affected?; was there any (positive or negative) knock-on impact on bars/restaurants as a result?; might there have been any difference to the level of disorder in on-licence premises if pre-drinking was reduced?; was the pricing of alcohol affected by the reduced availability?

The theory is simple: when alcohol is less available, people purchase and consume less, reducing intoxication and health harms. The Wicki et al. findings support this theory (1), but a more nuanced understanding might help in similar policy debates elsewhere: do people change what and where they drink or how they drink, and are there any subgroups of the population that respond out of line with the overall findings. Furthermore, local residents commonly have an influence in debates

about local availability policy (8,9), so their experiences are also likely to be important in determining the overall acceptability and maintenance of the changes.

Policy changes such as opening hours restrictions or expansions, which are developed by governments and introduced quickly with little/no consideration of future process or outcome evaluation, are, as a consequence, challenging to study. Systems-informed natural experiments are commonly recommended but rarely conducted, in part because they can be more complex and unpredictable than randomised trials, and harder to secure funding for (10). In this case, further studies might ask what led to the changes in Lausanne and Vaud, what contribution the changes have made to a wider range of outcomes, practices and behaviours, and how do both the policy changes and their effects evolve and interact over time for all sectors and stakeholders (11). Collecting a range of data such as this would help to overcome many of the weaknesses of prior availability research (12) and enable improved theorisation of mechanisms of impact (13).

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