Change in alcohol outlet density and alcohol-related harm to population health (CHALICE): a comprehensive record-linked database study in Wales

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Declared competing interests of authors: none

Published March 2016
DOI: 10.3310/phr04030

Plain English summary

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Public Health Research 2016; Vol. 4: No. 3
DOI: 10.3310/phr04030

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What was the problem/question?

We know that excess alcohol consumption causes harmful effects to health and also leads to violence. We did not know whether or not a change in the availability of alcohol could lead to a change in the harm caused by alcohol. Our aim was to study patterns of harm in Wales related to changes in alcohol availability. We also wanted to see if the amount of harm was different in areas that were higher or lower in social deprivation.

What did we do?

To measure alcohol availability we took the average of the distances between all households and all licensed alcohol premises within a small geographical area. We then analysed the link between our new measure of alcohol availability and anonymised data from the Welsh Health Survey, hospital records and the police. We looked at harmful outcomes such as excessive alcohol consumption, hospital admissions and violent crimes.

What did we find?

We found that higher availability of alcohol and change over time were related to an increase in alcohol-related harm. We found that the patterns of harm were not the same across Wales. We found that more deprived local authority areas had higher levels of poorer health caused by alcohol and more violent crime.

What does this mean?

Our results suggest that changes in alcohol availability are related to the harmful effects of alcohol. We are now sharing our findings with the NHS, local government and alcohol charities. We aim to influence policy and practice to improve population health and reduce health inequality.
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This report

The research reported in this issue of the journal was funded by the PHR programme as project number 09/3007/02. The contractual start date was in July 2011. The final report began editorial review in November 2014 and was accepted for publication in April 2015. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The PHR editors and production house have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the PHR programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the PHR programme or the Department of Health.

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