Interim report on the impact of Minimum Unit Pricing (MUP) among people who are alcohol dependent and accessing treatment services – briefing paper

Introduction

Minimum unit pricing (MUP) for alcohol was implemented in May 2018 and is currently set at £0.50 per unit (pu) of alcohol. Public Health Scotland has been tasked by the Scottish Government to evaluate the impact of MUP on a number of different outcome areas.

As part of this evaluation we commissioned the University of Sheffield to look at the impact of MUP on those drinking at harmful levels. The research as a whole contains four separate work packages.* This briefing paper is based on an interim report from the first of these work packages (called 'Work Package 1 (WP1)' from here on) which focuses on people who are dependent on alcohol and are accessing treatment services. People who are dependent on alcohol have complex needs and may respond to MUP in ways that have consequences for their own health and wellbeing, that of those around them, and wider society.

The interim report[1] presents a description of collected data and early findings from WP1 about the impact of MUP on people with alcohol dependence who access treatment services. There will also be a final report on WP1 as a whole, along with the findings from the other work packages, in 2022.

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* These are: mixed-method study with those entering alcohol treatment services and service providers; interviews with those drinking at harmful levels and family members recruited through the community; analysis of a longstanding self-report survey on drinking behaviour conducted by a market research company; and analysis of primary care data.

Aims of Work Package 1 (WP1) and this report

The aim of WP1 is to investigate the impact of implementing MUP on people who are alcohol dependent and accessing treatment services in terms of their alcohol consumption and spending, and any positive and negative secondary effects of the policy. It also aims to identify potential strategies for minimising harm in this population.

The aims of the interim report are:

- To describe the data that have been collected for the structured interview component of WP1.
- To describe what proportion of participants were in subgroups of particular interest.
- To present early findings about anticipated and actual responses to MUP, awareness of changes in product availability and price, and awareness of, and need for, harm minimisation support strategies.

What the researchers did

To address the aims of WP1, a research design was developed that combined quantitative data, collected through structured interviews, and qualitative data, collected through qualitative interviews. The two types of data are mutually supportive in enabling understanding of the impact of MUP on people with alcohol dependence accessing treatment services. The interim report is about data and findings from the structured interviews only.

The research team conducted structured interviews with adults entering treatment services in Scotland and Northern England. Types of service included alcohol and drug treatment services, hospital liver services, and general practices. Participants were recruited in six geographical areas in Scotland and four in England. The areas in Scotland included rural and urban areas as well as areas near to the border with England to allow exploration of how responses to, and the impact of, MUP might vary in different places.

A screening tool called the Alcohol Use Disorders Identification Test (AUDIT)[2] was used to identify participants likely to have alcohol dependence.

Data were collected from three different samples of people taken at three time points: up to 6 months before MUP was implemented (wave 1), 3 to 9 months after MUP implementation (wave 2) and 18 to 22 months after MUP implementation (wave 3).

For each wave of data collection, the researchers noted the place and service type where people accessed treatment, as well as characteristics such as age and gender. The researchers assessed whether people were in the following five overlapping sub-groups:

- Bought alcohol below £0.50pu on average ('cheap alcohol').
- Used illicit substances.
- In poor health.
- Economically vulnerable.
- Have dependent children.

As well as being interviewed, participants were asked to complete a retrospective diary recalling the alcohol they had purchased and consumed in the last typical drinking week before treatment, using a method called Time Line Follow Back (TLFB). They were also asked to complete a questionnaire called the Severity of Alcohol Dependence Questionnaire (SADQ) that is used to tell whether alcohol dependence is mild, moderate or severe.

In the interviews, people were asked about a wide range of topics relating to alcohol use, covering the following:

- Their anticipated response to MUP before it was implemented or their actual responses to MUP after it was implemented.
- Their awareness of changes in product price and availability following the introduction of MUP
- Awareness of and need for harm minimisation support strategies to respond to MUP.

The researchers have also collected data on:

- alcohol use, spending and dependence
- other substance use
- health status
- level of deprivation
- negative parenting outcomes.

What did the researchers find?

Description of the data collected

At each wave, the research team aimed to recruit 200 people from sites in Scotland and 80 people from sites in England. Those targets were derived after considering the research design as well as pragmatic and statistical factors. There were challenges to recruitment, including a limited time window between confirmation that MUP would occur and implementation at wave 1, an earlier finish to wave 3 than planned due to the COVID-19 pandemic (and therefore lower numbers), and a tendency for some recruitment sites and settings to be more challenging for recruiting participants than others. In Scotland the number of participants recruited was 174 at wave 1, 193 at wave 2 and 123 at wave 3. In England the number of participants recruited was 85 at wave 1, 87 at wave 2 and 52 at wave 3.

Most of the participants were aged 30 to 50 years, with an average age mid-40s in both Scotland and England and over both waves. About two-thirds of the sample were male in all waves in Scotland, but in England the samples were more variable with 72% being male in the first wave, 58% in the second wave and 67% in the third wave. There were differences between Scotland and England, and between waves, in the type of service recruited from. The proportions recruited from each city sometimes varied between waves.

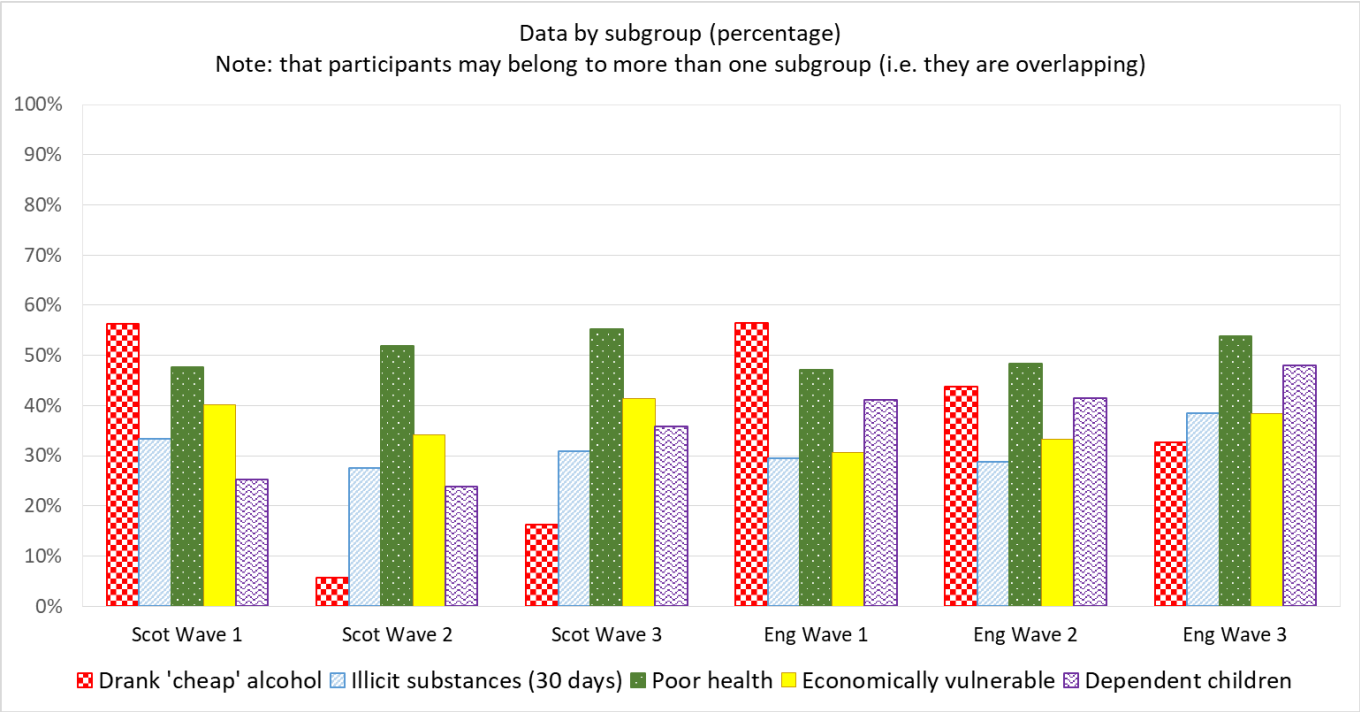
Therefore, in order to examine changes in outcomes in light of these differences in the composition of the samples achieved over time and in different countries, statistical analyses using weighting procedures will be required. The results of these analyses will be included in the final report, due in 2022.

Proportions of subgroups in each wave

There are challenges in accurately assessing the average price at which participants bought alcohol. The method used relies on participants' recall of their last typical drinking week before treatment, which may have been affected by the length of time since entering treatment, the effects of previous intoxication or current withdrawal, and memory problems. However, a substantial number of participants reported a regular pattern of consumption from day to day and so were able to recall products, volumes and prices. At wave 1, the proportion who bought alcohol with an average price less than £0.50 pu ('cheap' alcohol) was similar in both countries (59% in Scotland and 58% in England). After MUP implementation the proportion in this group in Scotland fell markedly to 6% in wave 2, then rose to 17% in wave 3. Of the few cases (11 at wave 2 and 20 at wave 3) where participants reported buying alcohol at an average price below £0.50 pu, for the majority (10 out of 11 at wave 2 and 15 out of 20 at wave 3) the price was in the range £0.40 to £0.49 pu. In England, where MUP does not apply, there was a much smaller drop in the proportion buying alcohol under £0.50 pu, from 58% in wave 1 to 45% in wave 2 and 37% in wave 3.

The proportions of people recruited to WP1 who were using illicit substances, economically vulnerable, in poor health and who had dependent children remained broadly steady in both countries (Figure 1). Confidence intervals (not shown) crossed for all changes except 'drank cheap alcohol' in Scotland. This indicates it is likely that the reduction in the proportion who 'drank cheap alcohol' reflects a real change among people drinking at harmful levels whereas differences between waves for the other subgroups are more likely to be due to chance.

Figure 1: Waves of data by subgroup (percentage)

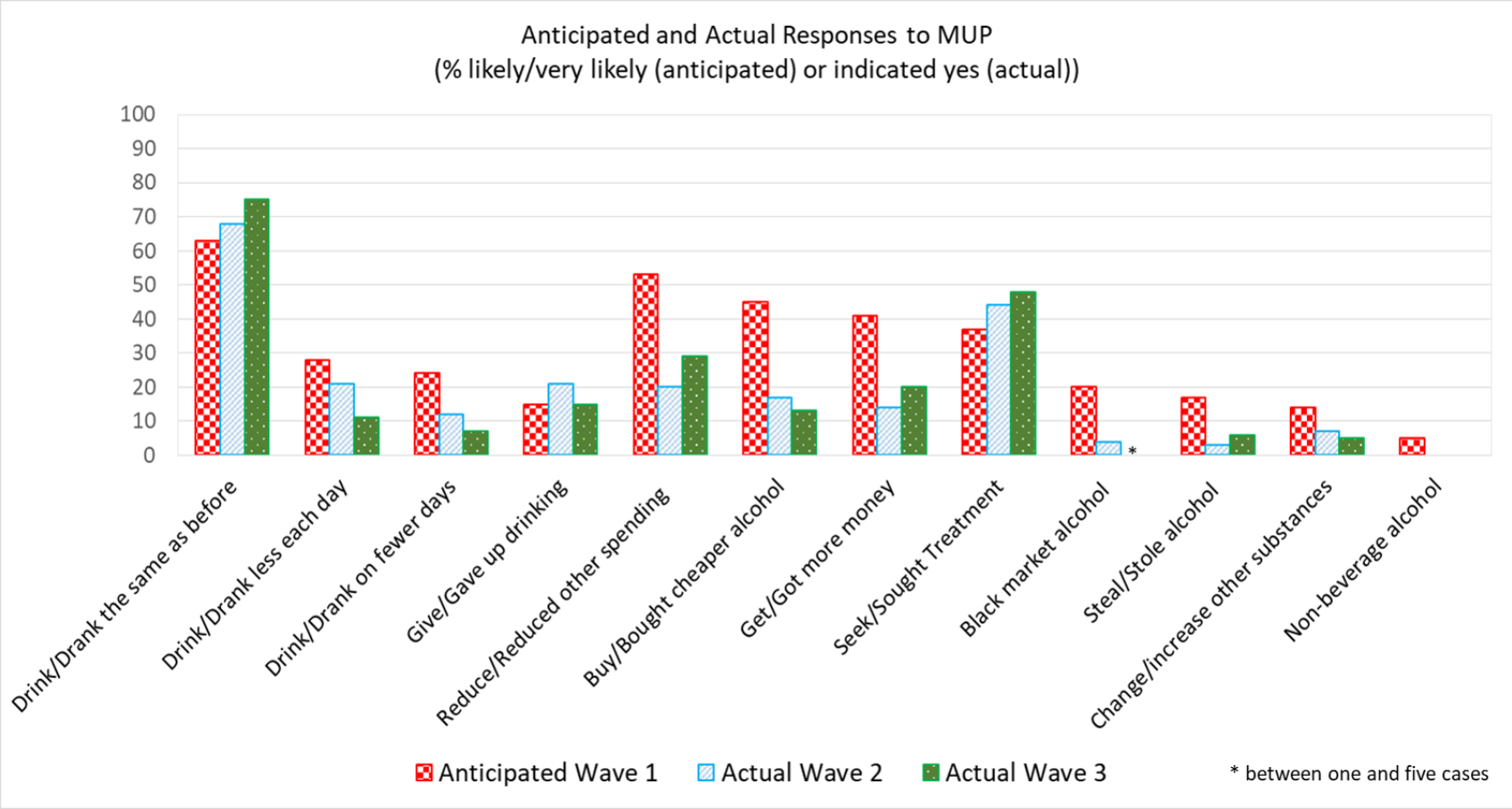


Anticipated and actual response to MUP

The research team asked wave 1 participants in both countries how likely they would be to respond in specified ways to an increase in the price of alcohol. At waves 2 and 3, post-MUP (when the price had increased), they asked participants in Scotland whether they had acted in any of these ways and, where relevant, the extent to which they attributed this to MUP. Sixty-three percent anticipated drinking about the same post-MUP. In practice, 68% at wave 2 and 75% in wave 3 reported drinking about the same. Twenty-eight percent anticipated drinking less on each day post-MUP. In practice 21% at wave 2 and 11% at wave 3 reported drinking less on each day. Twenty-four percent anticipated drinking on fewer days post-MUP. Twelve percent at wave 2 and 7% at wave 3 reported drinking on fewer days (Figure 2). Of those drinking less each day, fewer than half said that MUP was a major or minor reason for the change.

There is some evidence that people may have reduced spending on other things after MUP implementation (20% at wave 2 and 29% at wave 3). The percentage reporting doing so was less than anticipated at wave 1 (53%) (Figure 2). There were very few reports of substitution to illicit, stolen or non-beverage alcohol or increase in other substance use after MUP implementation. Those reporting changes in spending behaviour typically said this was due to MUP, but other changes in behaviour were less consistently attributed to the policy, particularly at wave 3.

Figure 2: Anticipated and actual responses to MUP (Note: different groups of people at each wave)



Awareness of changes in product availability and price

In Scotland, at wave 1 prior to MUP implementation, some participants (25%) reported noticing prices changing. Among these participants, most (72%) said it was becoming ‘a little more expensive’. At wave 2, 62% noticed prices changing, of whom around two-thirds (68%) reported they were ‘much’ more expensive. At wave 3, 34% noticed prices changing, of whom around half (49%) thought they were ‘much’ more expensive.

A quarter (24%) of participants at wave 2 and 15% at wave 3 noticed products disappearing, and these products were most commonly high-strength ciders. Price increases were also commonly noticed for high-strength ciders, with high-strength beers, wines and spirits also mentioned.

By contrast in England few participants noticed prices changing, and if so, this was generally ‘a little more expensive’, and very few noticed products disappearing.

Need for and awareness of harm minimisation support strategies

Respondents were asked at wave 1 what support they would need to prepare for MUP. In Scotland, about half of participants said they would need support to help prepare for the anticipated impact of MUP on them. Some participants provided suggestions about what support would be needed, such as increased access to detox, financial support or advice. After implementation of MUP, at waves 2 and 3, participants in Scotland were asked whether any support had actually been offered to cope with the rise in alcohol prices since May 2018, what this support was, and what else might have been helpful. The vast majority of participants were not aware of any such support available to them.

What these findings mean

The interim report describes the data collected and presents some early findings on anticipated and actual responses to MUP, awareness of changes in product availability and price, and need for support strategies.

The potential for negative outcomes was identified in the logic model underpinning the MUP evaluation.[3] The study finds no evidence of widespread negative consequences, such as a shift to using illicit, stolen or non-beverage alcohol or other substances following the introduction of MUP. However, there is an indication that a minority of people who are dependent on alcohol may have reduced daily living expenditure due to spending more on alcohol.

The findings suggest a high level of compliance with MUP, with few people in Scotland reporting they are buying alcohol at less than £0.50 pu. The study finds that people with alcohol dependence for the most part noticed prices rising, notably high-strength ciders.

About half of people with alcohol dependence indicated that they would need support to prepare for a rise in the minimum price of alcohol, for example detox, financial support or advice, but most were not aware of any being available.

The report provides early findings from an ongoing study. The descriptive analyses in this report show that samples differ between waves and between countries. These differences will make it more challenging to tell if any differences between waves or countries are due to the effects of MUP rather than due to having different kinds of people in each sample. Careful consideration is therefore needed when interpreting the results. Statistical analyses and weighting procedures will be used with the aim of addressing these challenges in the final report. Additionally, the quantitative data from structured interviews will need to be considered carefully alongside the qualitative data also collected for WP1 in order to understand the impact of MUP on people with alcohol dependence accessing treatment services.

How the findings fit with other MUP studies published so far

This descriptive study adds to our understanding of the impact of MUP gained from other studies published to date. It adds new information gathered from participants with alcohol dependence who are accessing treatment services.

The finding that few participants in Scotland reported purchasing alcohol less than £0.50 pu is consistent with other studies. Our Compliance study reported that licensing practitioners considered compliance to be high. The Small Retailers study[4] found that such retailers reported taking compliance seriously and that there were few observed instances of products priced below MUP in the retailer audit conducted after MUP implementation. Similarly, and consistent with high compliance, studies have also reported that the price of alcohol in Scotland increased after MUP.[5]

Further findings from the harmful drinking study, detailed in the next section, will be included in the final report, due in 2022. Assessing the impact of MUP overall will require reports from all the MUP evaluation studies, and these will be pulled together for a report due in late 2023.

Other evidence on the impact of MUP on those drinking at harmful levels

This briefing paper summarises the interim report from the first of four work packages[6] that constitute the wider 'Harmful Drinking' study. The final report of that study will also include:

- Statistical analyses of further structured interview and TLFB data from this study. These include data on key outcomes across the five domains described earlier as well as experience of crime.
- Analysis of qualitative interview data collected as part of this study from alcohol treatment service users and providers.
- Analysis of qualitative data collected from people drinking at harmful levels, and from family members of those drinking at harmful levels, both recruited through the community.
- Statistical analysis of a self-report survey on drinking behaviour undertaken by a market research company.
- Statistical analysis of primary care data, if these data are considered robust enough to use.

The 'Harmful Drinking' study is complemented by additional studies on the impact of MUP on alcohol attributable health harms,[7] which will assess the impact of MUP on population-level hospitalisation and deaths that happen as a result of alcohol consumption. Analysis of the alcohol-specific causes that are associated with heavy drinking, such as alcohol-specific liver disease, will provide further evidence on whether or not those drinking at harmful levels (but not necessarily dependent) are drinking less after MUP implementation.

Conclusion

The results of this study so far suggest that there is little evidence of negative consequences of MUP, such as a shift to using illicit substances, for people who are alcohol dependent and accessing treatment services. However, there is an indication that some people who are dependent on alcohol may have reduced daily living expenditure due to spending more on alcohol. When participants in Scotland were asked about their behaviours since MUP was introduced, the most common behaviour (reported by over two-thirds of participants) was ‘drank about the same as before’. The study also found that people with alcohol dependence expressed a need of support to prepare for price rises before MUP was implemented but were not aware of any being available. The results build on existing studies finding that there is a high level of compliance with MUP policy in Scotland.

References

[1] Buykx P, Perkins A, Hughes J et al. Impact of minimum unit pricing among people who are alcohol dependent and accessing treatment services: Interim report: Structured interview data, June 2021.

[2] Babor TF, Higgins-Biddle JC et al. The alcohol use disorders identification test: Guidelines for use in primary health care. Geneva: World Health Organization; 1992.

[3] Dickie E, Mellor R, Myers F and Beeston C. Minimum unit pricing (MUP) evaluation: Compliance (licensing) study. Edinburgh: NHS Health Scotland; 2019.

[4] Evaluating the impact of alcohol minimum unit pricing in Scotland: Observational study of small retailers. Edinburgh: NHS Health Scotland; 2019.

[5] Giles L, Robinson M and Beeston C. Minimum unit pricing (MUP) evaluation. Sales-based consumption: a descriptive analysis of one year post-MUP off-trade alcohol sales data. Edinburgh: NHS Health Scotland; 2020.

[6] University of Sheffield. Evaluating the impact of minimum unit pricing in Scotland on harmful drinkers. Study protocol. March 2017. Available at www.healthscotland.scot/media/2302/evaluating-the-impact-of-mup-in-scotland-on-those-drinking-at-harmful-levels.pdf

[7] Public Health Scotland. Evaluating the impact of minimum unit pricing (MUP) on population alcohol consumption and alcohol attributable health harms. Study protocol. August 2019. Available at www.healthscotland.scot/media/2943/evaluating-the-impact-of-mup-on-population-alcohol-consumption-and-alcohol-attributable-health-harms-study-protocol.pdf