ISRCTN33169631 https://doi.org/10.1186/ISRCTN33169631

Does altering the serving sizes of beer and wine in pubs, bars and restaurants affect alcohol consumption?

Submission date
07/09/2021

Recruitment status
No longer recruiting

Registration date
08/09/2021

Overall study status
Completed

Last Edited
19/01/2024

Condition category
Oral Health

[X] Prospectively registered
[X] Protocol
[X] Statistical analysis plan
[X] Results
[X] Individual participant data

Plain English summary of protocol

Background and study aims
There is has been little research on whether selling smaller portions of alcoholic drinks in pubs and bars reduces the total amount consumed. This study aims to investigate whether adding a two-third pint option for beer and cider sold on tap or removing the largest serving size for a glass of wine reduces the amount that is drunk.

Who can participate?
Licensed premises that offer beer and/or wine and are willing to change the serving sizes of beer and/or wine that they offer.

What does the study involve?
Licensed premises who agree to introduce a 2/3 pint serving size for all of the beer, cider and ale available on tap will do so for a period of 4 weeks. Premises will also be asked to inform customers of the 2/3 pints option by putting signs up. Licensed premises who agree to remove the 250-ml serving for glasses of wine will do so for a period of 4 weeks. Premises will be asked to remove mention of the 250-ml serving from menus and signs as necessary. Sales data will be collected from bars for a period of 12 weeks, covering 4 weeks of baseline business as usual, 4 weeks of the intervention and 4 weeks of going back to business as usual.

What are the possible benefits and risks of participating?
A possible benefit of participating is the opportunity to contribute to a better understanding of how the serving sizes of beer and wine affect sales. Student bars could also contribute to the NUS initiative ‘Alcohol Impact' for safe drinking in students. Licensed premises may benefit from publicity in taking part in this research once the results have been published, but can choose to stay anonymous if they wish. There is no change for the customers except the serving sizes, so there is no risk or benefit to visiting premises participating in the study.

Where is the study run from?
Institute of Public Health, University of Cambridge (UK)

When is the study starting and how long is it expected to run for?
September 2021 to May 2022

Who is funding the study?
The Wellcome Trust (UK)

Who is the main contact?
Professor Theresa Marteau, tm388@medschl.cam.ac.uk

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
WT 206853/Z/17/Z

Study information

Scientific Title
The impact of altering serving sizes of beer and wine on alcohol consumption: a field study

Study objectives
1. Introducing the option for two-thirds of a pint for beer and cider reduces the amount of beer and cider sold.
2. Removing the largest available serving of a glass of wine (250 ml or 175 ml) reduces the amount of wine sold.

Ethics approval required
Old ethics approval format

Ethics approval(s)

Approved 02/08/2019, Psychology Research Ethics Committee of the University of Cambridge (School of the Biological Sciences, 17 Mill Lane, Cambridge, CB2 1RX; +44 (0)1223 766876; cheryl.torbett@admin.cam.ac.uk), ref: PRE.2019.035

Primary study design
Interventional

Study design
Interventional cross-over study

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Excessive alcohol consumption

Interventions
Intervention 1: Adding a two-thirds pint serving size Sites will add a two-thirds pint serving size for all beers and ciders available on tap. The two-thirds pint will be offered in addition to the existing one pint and half-pint serving sizes, with proportionate pricing as far as is possible i.e. with a price which is linear-by-volume between the pint and half-pint sizes. Sites will choose two-thirds pint glasses to fit with their existing glassware, to be provided by the researchers. Bars will be allowed to keep the glassware after the study.

As part of the intervention, sites will adopt a range of strategies in keeping with their existing practices to draw customers' attention to the new two-thirds pint option, including information on menus, signs behind the bar and prompting by bar staff when customers are ordering their drink. These practices will be described but not controlled.

Intervention 2: Removing the largest serving size for glasses of wine Sites will reduce their range of serving sizes for glasses of wine by removing the largest serving size for a glass of wine in their existing range. This will either be 250 ml or 175 ml, with 125 ml sizes always available in keeping with current regulations for selling alcohol in licensed premises. Menus and signage will be updated to reflect this change.

The study has a treatment reversal design with three consecutive 4-week periods as follows: ABA, where A represents the baseline periods during which standard serving sizes will be served and B represents the intervention periods in which the range of serving sizes will be modified Sites agreeing to implement both interventions will first complete intervention 1 followed by intervention 2 or vice versa.

Intervention Type
Behavioural

Primary outcome(s)
Intervention 1: Daily volume (in ml) of beer and cider purchased (including on tap, bottle, or can), measured using electronic records of sales
Intervention 2: Daily volume (in ml) of wine sold (including by the glass, bottle, and carafe), measured using electronic records of sales.

Sales will be recorded for 12 weeks, including 4 weeks of business as usual before the intervention, 4 weeks of the intervention, and 4 weeks going back to business as usual after the intervention.

Key secondary outcome(s)
1. Daily volume of beer and cider sold by serving size (pint, ½ pint, 2/3 pint, bottle sizes, can sizes) measured using electronic records of sales
2. Daily volume of wine purchased by serving size (125 ml, 175 ml, 250 ml, carafe, 750 ml bottle) measured using electronic records of sales
3. Daily volume of alcohol sold excluding beer and cider (during intervention 1) or wine (during intervention 2) measured using electronic records of sales
4. Daily revenue from food and alcoholic and non-alcoholic drink measured using electronic records of sales
5. Daily number of transactions measured using electronic records of sales
6. Daily amount of beer and cider (during intervention 1) or wine (during intervention 2) sold in units of alcohol (in cases where it is practical to extract this information from electronic sales data) measured using electronic records of sales

Additional measures
For sites implementing Intervention 2, the capacity of their usual wine glasses will be recorded.

Completion date
08/05/2022

Eligibility

Key inclusion criteria
Participants will be individual public houses and bars.
1. Sell beer (and/or cider) on tap in sizes larger than two-thirds of a pint (Intervention 1)
2. Sell a minimum of 150 pints of beer and/or cider on average per week (Intervention 1)
3. Willing to introduce a two-thirds pint serving size for all beer and cider available on tap at a proportionate price (Intervention 1)
4. Sell wine by the glass in serving sizes greater than 125ml (i.e. 175ml or 250ml) (Intervention 2)
5. Sell a minimum of 100 glasses of wine on average per week (Intervention 2)
6. Willing to cap the serving size of a glass of wine (Intervention 2)
7. Have an electronic point of sale (EPOS) till system to record daily sales of all drinks and their served sizes.
8. Are primarily indoor, permanent establishments in a fixed location; i.e. not purposefully temporary or time-limited (e.g. pop-up), or mobile venues (e.g. vans)

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Total final enrolment
39

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
13/09/2021

Date of final enrolment
01/02/2022

Locations

Countries of recruitment
United Kingdom

England

Northern Ireland

Scotland

Wales

Study participating centre
Institute of Public Health University of Cambridge
Robinson Way
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Sponsor information

Organisation
University of Cambridge

ROR
https://ror.org/013meh722

Funder(s)

Funder type

Charity

Funder Name
Wellcome Trust

Alternative Name(s)
Wellcome, WT

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The study will not use individual-level data: the unit of randomisation, data collection and analysis will be individual public houses and bars. The datasets generated and/or analysed during the current study will be stored in a publicly available repository. All study data will be anonymised using a unique numeric identifier. At the appropriate time, the anonymous study datasheet will be locked and deposited on the University of Cambridge Data Repository. If a publican decides that they do not want their data to be used after their participation they have the right to request that their data are withdrawn from the study. They can request this up to two weeks after study completion. Publicans are made aware of this prior to giving consent to their participation in the study and to the use of their anonymised study data.

IPD sharing plan summary
Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		26/06/2023	27/06/2023	Yes	No
Results article		18/01/2024	19/01/2024	Yes	No
Dataset		09/03/2023	27/06/2023	No	No
Protocol file	version 2	07/09/2021	08/09/2021	No	No
Statistical Analysis Plan		23/05/2023	27/06/2023	No	No