This is a repository copy of *Associations of alcohol use, mental health and socioeconomic status in England: Findings from a representative population survey*.

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Version: Supplemental Material

Supplementary material

Supplementary table 1: Prevalence of alcohol use among those meeting criteria for one or more CMD or SMI

		Non-drinking	Low risk	Hazardous use	Harmful/probable dependence	
		N (weighted %, 95% CI)	N (weighted %, 95% CI)	N (weighted %, 95% CI)	N (weighted %, 95% CI)	Total
Total number of CMDs**	None	1,485 (22.15, 20.88-23.47)	3,953 (58.80, 57.36-60.22)	943 (16.53, 15.48-17.63)	141 (2.53, 2.10-3.04)	6,522
	Any one	131 (25.80, 21.14-31.09)	230 (47.50, 41.13-53.96)	77 (18.88, 13.51-25.74)	35 (7.82, 5.45-11.10)	473
	Any two	56 (33.00, 26.25-40.52)	67 (39.75, 31.05-49.15)	23 (16.37, 12.65-20.93)	19 (10.88, 6.83-16.91)	165
	All three	29 (51.64, 37.48-65.55)	14 (28.69, 13.76-50.35)	8 (8.75, 3.02-22.82)	7 (10.92, 2.47-37.24)	58
Total number of SMIs**	None	1,636 (22.52, 21.29-23.80)	4,201 (58.14, 56.74-59.54)	1,020 (16.55, 15.51-17.64)	178 (2.79, 2.36-3.29)	7,035
	One	55 (30.97, 23.32-39.82)	57 (32.47, 23.20-43.35)	29 (21.06, 10.41-37.97)	22 (15.59, 8.71-26.08)	163

*CI=Confidence interval **CMD=includes those meeting criteria for depression, anxiety or phobia, SMI=includes those meeting criteria for bipolar

disorder or probable psychotic disorder

Supplementary table 2: Associations of alcohol use among those meeting criteria for one or more CMD or SMI

	Unadjusted[ab]						Adjusted for demographic and SES characteristics[ab]					
	Non-drinking		Hazardous use		Harmful/probable dependence		Non-drinking		Hazardous use		Harmful/probable dependence	
	MOR (95% CI)	P	MOR (95% CI)	P	MOR (95% CI)	P	MOR (95% CI)	P	MOR (95% CI)	P	MOR (95% CI)	P
Number of CMD** Any One	**1.44 (1.12-1.86)**	**0.01**	**1.41 (1.03-1.94)**	**0.03**	**3.83 (2.46-5.97)**	**0.01**	1.33 (1.00-1.78)	0.05	**1.47 (1.06-2.05)**	**0.02**	3.76 (2.39-5.93)	0.01
Any Two	**2.20 (1.45-3.35)**	**0.01**	1.46 (0.80-2.69)	0.22	**6.37 (3.39-11.96)**	**0.01**	1.48 (0.92-2.37)	0.10	1.63 (0.90-2.95)	0.11	**5.90 (3.08-11.32)**	**0.01**
All Three	**4.78 (2.22-10.28)**	**0.01**	1.08 (0.41-2.86)	0.87	**8.86 (3.41-23.04)**	**0.01**	**3.39 (1.49-7.74)**	**0.01**	1.16 (0.40-3.40)	0.79	**5.90 (2.08-16.75)**	**0.01**
Number of SMI** Any One	**2.46 (1.66-3.66)**	**0.01**	**2.28 (1.29-4.02)**	**0.01**	**9.96 (5.70-17.40)**	**0.01**	**2.21 (1.44-3.39)**	**0.01**	**2.04 (1.15-3.62)**	**0.02**	**6.82 (3.72-12.49)**	**0.01**

Supplementary table 3: Interaction between gender and symptoms of CMD

	MOR (95% CI)	*P*
Female and moderate symptoms of CMD	-0.03 (-0.22-0.15)	0.72
Female and severe symptoms of CMD	0.00 (-0.19-0.20)	0.98

Bold text indicates significance

Supplementary table 4: STROBE Checklist

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	Page No
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	2
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	3-4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods			
Study design	4	Present key elements of study design early in the paper	4
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	4
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants	4

Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	5-7
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	5-6
Bias	9	Describe any efforts to address potential sources of bias	7
Study size	10	Explain how the study size was arrived at	7
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	4-7
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	7
		(*b*) Describe any methods used to examine subgroups and interactions	7
		(*c*) Explain how missing data were addressed	7
		(*d*) If applicable, describe analytical methods taking account of sampling strategy	7
		(*e*) Describe any sensitivity analyses	7

Results

Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	7
		(b) Give reasons for non-participation at each stage	7
		(c) Consider use of a flow diagram	NA
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	7-8, Table 1
		(b) Indicate number of participants with missing data for each variable of interest	7
Outcome data	15*	Report numbers of outcome events or summary measures	7-9, Tables 1, 2 and 3
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	7-9, Tables 1, 2 and 3

		(*b*) Report category boundaries when continuous variables were categorized	5-6
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	NA
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	9 and supplementary materials

Discussion

Key results	18	Summarise key results with reference to study objectives	9-10
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	11-12
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	10-12
Generalisability	21	Discuss the generalisability (external validity) of the study results	9-12

Other information

Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	14

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.