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EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES OF INTEREST AMONG COMMUNITY-DWELLING OLDER ADULTS: a protocol for a systematic review

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2019-035481
Article Type:	Protocol
Date Submitted by the Author:	04-Nov-2019
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Keywords:	Old age psychiatry < PSYCHIATRY, EPIDEMIOLOGY, GERIATRIC MEDICINE, Substance misuse < PSYCHIATRY, PUBLIC HEALTH

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Research protocol for a systematic review
EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES OF
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For peer review only

Abstract

Introduction:

There is little epidemiological evidence and knowledge about at-risk alcohol use among community-dwelling older adults and their chronic and acute alcohol-related comorbidities of interest. This systematic review will summarise and examine the relevant studies retrieved about the epidemiology of at-risk alcohol use and associated comorbidities of interest in this population.

Methods:

We will search the following databases, without language or date restrictions from inception to August 31 2019: Embase.com, Medline Ovid SP, Pubmed (NOT medline[sb]), CINAHL EBSCO, PsycINFO Ovid SP, Central - Cochrane Library Wiley and Web of Science (Core collection). The search strategies will be developed in collaboration with a librarian. We will use the predefined search terms for alcoholism, epidemiological terms, terms for elderly, terms for living place, terms related to the comorbidities of interest and terms related to identifying “measurements” or “tools” or “instruments” to measure harm from alcohol use. At-risk status will be determined by the amount of alcohol consumed and the comorbidities of interest associated with at-risk alcohol use, with the latter being documented separately or using an assessment tool for at-risk drinking. We will also examine the bibliographies of all the relevant articles found and conduct a search for unpublished studies. We will consider publications without language restrictions.

Results:

We completed the first step of our search strategy in September 2019 and found after removing duplicates 36'476 references. The next steps are ongoing.

Ethics and dissemination:

No ethical clearing is necessary. Results will be presented in national and internal conferences of addiction and published in a peer reviewed journal.

Keywords: alcohol consumption, alcohol dependence, at-risk drinking, comorbidities, disorders, epidemiology, geriatric drinkers, community-dwelling, incidence, injury, occurrence, hypertension, depression, pain, liver disease, insomnia, cognitive deficiency, diabetes, anxiety, living in place, mortality, multimorbidity, older adults, prevalence, polymorbidity, older and very old adults.

Strengths and Limitations of this study

- Providing specific knowledge about the epidemiology of at-risk alcohol drinking and comorbidities of interest among community-dwelling older adults.
- Clear definitions of at-risk alcohol consumption among older adults and of the quantification of that consumption;
- Inclusion criteria, which impose no restrictions on language, year or geographic location;
- Nevertheless, any personal judgments in the authors' study assessments could introduce bias.

PROSPERO registration number: CRD42018099965

98 INTRODUCTION

99 Alcohol consumption and misuse is a major substance abuse problem among
100 community-dwelling older adults (1-3). Excessive alcohol use is a well-known health
101 risk among aged people (4). It is widely documented that older adults' responses to
102 alcohol are different from those of younger adults due to the physiological process of
103 ageing (5, 6). The physiological changes occurring with ageing, as well as differences in
104 the activities and responsibilities of older people, are used for establishing the criteria of
105 alcoholism and ageing (7, 8). Epidemiological studies have shown declining alcohol use
106 with age (4, 9, 10). However, the number of older adults exhibiting at-risk drinking is
107 likely to increase when the age cohort born in the 1950s, with its heavier drinking
108 habits, reaches old age (11, 12). This is due to the increase in the number of heavy
109 drinkers and the social changes concerning the use of drugs and alcohol in the age
110 cohort born after 1950, also known as "baby boomers". The sociodemographic and
111 political changes during this time, especially in western countries, had a great impact on
112 the way people used and abused psychotropic substances. Older and very old adults are
113 more vulnerable to the effects of alcohol because of metabolic and other changes in their
114 bodies and their high rate of chronic diseases (1, 7, 13). Individual differences, like
115 general health, physical or psychiatric comorbidities, drinking-age onset and the
116 presence of cognitive impairment can alter responses to alcohol among older adults (6,
117 14, 15). As adults reach an advanced age and are more prone to cognitive decline (16,
118 17), the adverse effects of heavy alcohol use may be exacerbated (4, 18). Dementia
119 secondary to alcoholism is commonly diagnosed in older adults whose cognitive and
120 functional decline is inconsistent with progressive neurodegenerative disorders, such
121 as Alzheimer's disease, and whose clinical history indicates chronic heavy alcohol
122 consumption (19, 20). Older adults who reach a more advanced age experience systemic
123 physiological and neural alterations that may increase their vulnerability to the effects
124 of alcohol (19, 21). Additionally, due to the metabolic and neurological changes that
125 occur with at-risk drinking in old age, alcohol consumption is one of the lifestyle issues
126 which should be considered in cases involving diabetic, hypertensive and depressive
127 older patients (22). Many pharmacological treatments have potential interactions with
128 alcohol (23). Unfortunately, the criteria for alcohol abuse and dependence established
129 by the DSM or ICD manuals are not adapted for older and very old adults (24-26).
130 Bearing this in mind, physicians often use the at-risk, moderate and heavy drinking
131 model to better characterise drinking patterns (27, 28). Studies have recommended that
132 at-risk drinking should be considered on a case by case basis (29). Fundamentally, we
133 know that alcohol consumption in older age can compromise general health (5, 15).
134 Nonetheless, defining *at-risk drinking* has shown itself to be methodologically and
135 conceptually challenging (26, 30). Factors such as drinking volumes, drinking patterns,
136 types of drinks and drink size have been considered in efforts to define a threshold for
137 low-risk alcohol use (3, 20). Limits vary between countries and even between regions in
138 the same country (e.g. Spain) (14, 20, 31). At-risk drinking can be defined as alcohol
139 consumption beyond the limits that can lead to all-cause mortality, chronic conditions
140 and acute consequences (6, 28, 31-34).

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3 141 The NIAAA definition of low-risk alcohol consumption—the lowest threshold (35)—has
4 142 established criteria for low-risk drinking for adults over 65 years. It recommends a
5 143 pattern involving no more than one alcoholic drink per day and sets a standard amount
6 144 of drink: one can (12 US fl oz or approx. 355 ml) of beer, one glass (5 US fl oz or approx.
7 145 148 ml) of wine, a small glass (4 US fl oz or approx. 118 ml) of liquor or one shot (1.5 US
8 146 fl oz or approx. 44 ml) of hard liquor. Translated into equivalent measures of pure
9 147 alcohol, as documented in the literature, these equate to 0.6 fluid ounces in imperial
10 148 measurements and ~17 grams in metric measurements (20). Multiple features of at-risk
11 149 drinking are documented in the literature (30). However, the USA's low-risk drinking
12 150 guidelines are generally in line with the risk levels observed in the scientific literature
13 151 (2, 36).

14 152 Comorbidity is defined as the presence of more than one distinct medical condition in an
15 153 individual. This condition can exist simultaneously with, but independently of, another
16 154 condition, or it can be related (37, 38). The comorbidities of interest are hypertension,
17 155 depression, pain, liver disease, insomnia, cognitive deficiency, diabetes and anxiety. Our
18 156 systematic review will explore at-risk alcohol use as we found no review on the issue in
19 157 the international literature although the awareness of at-risk alcohol use in the elderly is
20 158 getting higher among the general population and health professionals. The following
21 159 research questions will guide this systematic review: What is the reported epidemiology
22 160 of at-risk alcohol use and its associated comorbidities of interest among home-dwelling
23 161 older and very old adults in interventional and observational studies?

162 **METHODS**

163 This review will be conducted following the recommendations and harms-reporting
164 checklist of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for
165 Protocols (PRISMA-P) (39, 40), the reporting proposals of the Meta-analysis Of
166 Observational Studies in Epidemiology (MOOSE) (41) and the methods outlined in the
167 Cochrane Handbook for Systematic Reviews of Interventions (42) (Suppl. 1)
168 Database searches and other search techniques will be completed in September 2019.
169 Retrieved articles will then be screened. The entire study is expected to be completed by
170 September 2020.

171 ***Inclusion criteria***

172 *Types of studies*

173 This review will include randomised controlled trials (RCT), cluster randomised
174 controlled trials (CRCT) and non-randomised studies (NRS). NRS have been defined as
175 quantitative studies for estimating an intervention's effectiveness (harm or benefit) that
176 do not use randomisation to allocate units to comparison groups (42). We will include
177 retrospective and prospective epidemiological studies, cohort studies, case-control
178 studies, controlled before-and-after studies, interrupted-time-series studies and
179 controlled trials with inappropriate randomisation (quasi-experimental studies) (43,
180 44). We will search for papers without language restrictions.

181 *Types of participants*

182 This review will consider studies involving home-dwelling adults with a minimum mean
183 age of 60 years old, as well as studies with participants aged 55 years old or more with

184 an alcohol consumption of at least one alcoholic drink per day. Although various
 185 definition of old-age exist we refer to the UN cutoff considering 60+ as older persons
 186 (45).

187 *Types of outcome measures*

188 For this systematic review protocol, in order to highlight the epidemiology of at-risk
 189 alcohol consumption and the presence of comorbidities of interest in home-dwelling
 190 older and very old adults, we have chosen to set the drinking limit established by
 191 America's *National Institute on Alcohol Abuse and Alcoholism* (NIAAA) (46, 47).
 192 Considering at-risk drinking as a medical condition, we have chosen to search for
 193 epidemiological data concerning medical conditions simultaneously present among
 194 older at-risk drinking adults (36, 48). We have chosen not to limit our search to medical
 195 conditions cited with the Comorbidity Alcohol Risk Evaluation Tool (CARET) (49). In
 196 addition, we will cross-reference at risk alcohol consumption tools with medical
 197 conditions with those in the CoLaus / PsychoLaus study among the general population of
 198 Lausanne, Switzerland (50-52). This choice was made purposefully as, in the future, we
 199 plan to analyse Swiss data in order to compare them with data found in the international
 200 literature.

- 201 • The review's primary outcome measures will be the:
 - 202 ○ Epidemiology of at-risk alcohol consumption, age of onset and severity of
 - 203 alcohol use (amount, frequency and types of drinks).
- 204 • The review's secondary outcome measures will be the:
 - 205 ○ Psychiatric and somatic comorbidities frequently occurring among home-
 - 206 dwelling older adults with at-risk alcohol consumption;
 - 207 ○ Documentation of the tools and measurements of comorbidities
 - 208 associated with at-risk drinking;
 - 209 ○ Presence of epidemiological data on very old adults' drinking habits;
 - 210 ○ Associations between drinking volume and alcohol-related harm.

211 ***Search methods for the identification of studies***

212 *Electronic searching*

213 We will search the following databases, without language or date restrictions:
 214 Embase.com, Medline Ovid SP, Pubmed (NOT medline[sb]), CINAHL EBSCO, PsycINFO
 215 Ovid SP, Central - Cochrane Library Wiley and Web of Science (Core collection).

216 *Hand and grey literature searching*

217 We will search the reference lists of identified relevant articles, for unpublished studies
 218 (grey literature) and for field experts who can be contacted.

219 The search strategies will be adapted to the syntax and subject headings of each
 220 database. Descriptors terms will include:

- 221 • Terms for alcoholism: "at-risk alcohol use", "heavy drinking", "binge drinking",
 222 "alcohol dependence", "alcohol abuse", "Wernicke syndrome", "Korsakoff
 223 dementia", "at-risk drinking", "alcohol consumption", "alcohol dependency" and
 224 "geriatric drink*";
- 225 • Epidemiological terms: "epidemiology", "occurrence", "prevalence", "incidence"
 226 or "occasionally";

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3 227 • Terms for elderly: “home-dwelling older adults”, “elderly”, “aged”, “home-care
4 228 patients”, “older adults” and “very old adults”;
5
6 229 • Terms for living place: “home-dwelling”, “living in place”, “homebound”, “primary
7 230 care”, “community health services”, “community hospital”, “ambulatory care”,
8 231 “outpatient clinics”, “hospital”, “ambulatory care facilities”, “daycare”, “primary
9 232 health care”, “community health centres”, “health services for the aged”,
10 233 “community”, “domiciliary”, “home or home-care or home-based”, “outpatient”,
11 234 “day patient”, “community care”, “home care services”, “general practice” and
12 235 “urban population”;
13
14 236 • Terms related to the comorbidities of interest: “cognitive impairment”,
15 237 “diabetes”, “obesity”, “heart failure”, “depression”, “hypertension”, “insomnia”,
16 238 “liver failure”, “pain”, “dementia”, “cognitive deficiency” and “anxiety”;
17
18 239 • Terms related to identifying “measurement” or “tools” or “instrument” to
19 240 measure harm from alcohol use.

21 241 Suppl. 2 presents the search strategy and equations.
22
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25 243 **DATA COLLECTION AND ANALYSIS**

26 244 *Study selection*

27 245 Three reviewers—ML, KE and JPS—will independently screen the titles and abstracts
28 246 identified in the searches to assess which studies meet the inclusion criteria.

29 247 Disagreements will be resolved through discussion or, if needed, a consensus will be
30 248 reached after discussion with the co-authors (HV, AvG).

31 249 The reviewers will then independently assess the full-text articles to ensure that they
32 250 meet the inclusion criteria. Disagreements will be discussed and resolved with the co-
33 251 authors (HV, AvG). A flowchart of the trial selection process has been drawn in
34 252 accordance with the PRISMA statement (53) (Suppl. 3).

35 253 *Data Extraction*

36 254 Three authors—ML, KE and HV—will extract the data independently by using a specially
37 255 designed, standardised data extraction form (Suppl. 4). Discrepancies will be resolved
38 256 through discussion and consultation with the co-author (AvG).

39 257 The following information will be extracted from each study included: (1) study authors,
40 258 year of publication and country where the study was conducted; (2) study
41 259 characteristics (including setting and design, duration of follow-up and sample size); (3)
42 260 participants’ characteristics (including age, sex, social status, marital status, educational
43 261 status, activity, age of onset of alcohol consumption, level of autonomy, history of
44 262 violence); (4) comorbidities of interest (hypertension, depression, pain, liver disease,
45 263 insomnia, cognitive deficiency, diabetes, anxiety); and (5) types of outcome measures.

46 264 *Assessment of the Risks of Bias in Included Studies*

47 265 Three reviewers—ML, KE and JPS—will independently assess the risks of bias in all the
48 266 randomised and non-randomised studies of interventions (NRSI) included.

49 267 Disagreements will be resolved through discussion and consultation with the co-author
50 268 (HV, AvG).
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269 We will use the validated Cochrane Risk of Bias Tool, version 2.0 (54), to assess the risk
270 of bias in randomised trials and non-randomised studies. This is based on five domains:
271 (1) bias arising from the randomisation process; (2) bias due to deviations from
272 intended interventions; (3) bias due to missing outcome data; (4) bias in the
273 measurement of the outcome; and (5) bias in selection of the reported result. Each of
274 these five domains will be rated as either: (1) low risk of bias; (2) some concerns; or (3)
275 high risk of bias. Declaring that a study has a particular level of risk of bias in any
276 individual domain will mean that the study as a whole has a risk of bias.

277 We will use the validated Robins-I tool for assessing the risk of bias in NRSI (55). This
278 tool covers two dimensions and seven domains through which bias might be introduced
279 into an NRSI: i) pre- and at intervention (bias due to confounding, bias in the selection of
280 study participants and bias in the classification of the intervention), and ii) post-
281 intervention (bias due to deviations from intended interventions, bias due to missing
282 data, bias in the measurement of outcomes and bias in the selection of the reported
283 result) (55). Any disagreements in quality assessments will be resolved through
284 discussion.

285 **Statistical analyses**

286 Statistical analyses will be conducted following the recommendations of the Cochrane
287 Handbook for Systematic Reviews of Interventions (56) and the PRISMA and MOOSE
288 statements (57).

289 For dichotomous outcomes, average intervention effects will be calculated as relative
290 risks with 95% confidence intervals (CIs), using a random effects model (58). For
291 continuous data, a random effects model will be used to calculate weighted mean
292 differences with 95% CIs. If required, we will calculate standard deviations from the
293 standard errors or 95% CIs presented in the articles. Heterogeneity will be quantified
294 using the I^2 and chi-squared tests. Funnel plots will be drawn, and Egger tests will be
295 computed to explore the possibility of publication bias (59). Reasons for heterogeneity
296 in effect estimates will be sought in meta-analyses (60, 61). To explore the possible
297 determinants of heterogeneity, we will conduct subgroup analyses according to selected
298 study characteristics (e.g., participants' ages, country where the study was conducted,
299 amounts of alcohol). Furthermore, sensitivity analyses will be conducted by: (1)
300 excluding relatively small studies (with fewer than 20 participants per randomisation
301 group); and (2) restricting the analyses to studies of good quality. Data will be analysed
302 using SPSS software (version 25.0) and Review Manager 5.3.

303 **'Patient and Public Involvement'**

304 No patients or members of the public were involved in the preparation of this protocol
305 for a systematic review.

306

307 **RESULTS**

308 Table 1 presents a summary of the number of references retrieved with the search
309 strategy (Suppl. 2).

310 **[Insert Table 1]**

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3 312 **Discussion**

4 313 At-risk alcohol drinking among older adults is a common health problem. It is under-
5 314 diagnosed by primary care physicians, partially due to the lack of up-to-date
6 315 epidemiological data (27) and partially due to the lack of relevant and specific diagnostic
7 316 tools and instruments (26, 62, 63). We will propose recommendations about screening
8 317 tools and instruments which might be particularly appropriate for clinicians to use when
9 318 screening for alcohol misuse in certain contexts.

10 319 Before being able to highlight the lack of data on alcohol consumption among older and
11 320 very old adults or trying to establish relevant diagnostic criteria and assessment
12 321 methods, it is important to find out about the existing epidemiological data at an
13 322 international level. It is equally important to acknowledge the difficulty in defining at-
14 323 risk drinking at an international level and the methods used to extract this data (2).
15 324 Demonstrating a high prevalence, frequency or incidence of at-risk alcohol use among
16 325 older home-dwelling adults could encourage physicians to use existing screening tests.
17 326 This could be an important measure, considering that alcohol-related health problems
18 327 reduce the length and quality of life (64). Recent studies, however, have demonstrated
19 328 that elevated alcohol consumption cannot be evaluated solely in terms of frequency
20 329 (65); it is also necessary to know the types of drinks ingested (66).

21 330 **Ethics and Dissemination**

22 331 No ethical clearing is necessary. Results will be presented in national and internal
23 332 conferences of Addiction and published in an international peer reviewed journal.
24 333
25 334

References

1. Aira M, Hartikainen S, Sulkava R. Community prevalence of alcohol use and concomitant use of medication--a source of possible risk in the elderly aged 75 and older? *International journal of geriatric psychiatry*. 2005;20(7):680-5.
2. Dawson DA. Defining Risk Drinking. *Alcohol Research & Health*. 2011;34(2):144-56.
3. Treatment CfSA. Substance Abuse Among Older Adults. Treatment Improvement Protocol (TIP) Series, No. 26. Rockville (MD) - US: Substance Abuse and Mental Health Services Administration; 1998.
4. Blazer DG, Wu LT. The epidemiology of at-risk and binge drinking among middle-aged and elderly community adults: National Survey on Drug Use and Health. *The American journal of psychiatry*. 2009;166(10):1162-9.
5. Graham K, Schmidt G. The effects of drinking on health of older adults. *The American journal of drug and alcohol abuse*. 1998;24(3):465-81.
6. Blow FC, Walton MA, Barry KL, Coyne JC, Mudd SA, Copeland LA. The relationship between alcohol problems and health functioning of older adults in primary care settings. *Journal of the American Geriatrics Society*. 2000;48(7):769-74.
7. Cawthon PM, Fink HA, Barrett-Connor E, Cauley JA, Dam TT, Lewis CE, et al. Alcohol use, physical performance, and functional limitations in older men. *Journal of the American Geriatrics Society*. 2007;55(2):212-20.
8. Blanco C, Grant J, Petry NM, Simpson HB, Alegria A, Liu SM, et al. Prevalence and correlates of shoplifting in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). *The American journal of psychiatry*. 2008;165(7):905-13.
9. Eigenbrodt ML, Mosley TH, Jr., Hutchinson RG, Watson RL, Chambless LE, Szklo M. Alcohol consumption with age: a cross-sectional and longitudinal study of the Atherosclerosis Risk in Communities (ARIC) study, 1987-1995. *American journal of epidemiology*. 2001;153(11):1102-11.
10. Van Montfoort-De Rave KFG, De Weert-Van Oene GH, Beurmanjer H, Koekkoek B. Late-onset alcohol dependence: patient-reported problems. *Addiction Research & Theory*. 2017;25(2):139-45.
11. Adams WL, Cox NS. Epidemiology of problem drinking among elderly people. *The International journal of the addictions*. 1995;30(13-14):1693-716.
12. Pierucci-Lagha A. [Alcoholism and aging. 1. Epidemiology, clinical aspects and treatment]. *Psychologie & neuropsychiatrie du vieillissement*. 2003;1(3):197-205.
13. O'Connell H, Chin AV, Cunningham C, Lawlor B. Alcohol use disorders in elderly people--redefining an age old problem in old age. *BMJ (Clinical research ed)*. 2003;327(7416):664-7.
14. Bosque-Prous M, Brugal MT, Lima KC, Villalbi JR, Bartroli M, Espelt A. Hazardous drinking in people aged 50 years or older: a cross-sectional picture of Europe, 2011-2013. *International journal of geriatric psychiatry*. 2017;32(8):817-28.
15. Hu Y, Pikhart H, Maljutina S, Pajak A, Kubinova R, Nikitin Y, et al. Alcohol consumption and physical functioning among middle-aged and older adults in Central and Eastern Europe: results from the HAPIEE study. *Age and ageing*. 2015;44(1):84-9.
16. Woods AJ, Cohen RA, Pahor M. Cognitive frailty: frontiers and challenges. *The journal of nutrition, health & aging*. 2013;17(9):741-3.
17. Volkert J, Schulz H, Harter M, Wlodarczyk O, Andreas S. The prevalence of mental disorders in older people in Western countries - a meta-analysis. *Ageing research reviews*. 2013;12(1):339-53.
18. Riege WH, Holloway JA, Kaplan DW. Specific memory deficits associated with prolonged alcohol abuse. *Alcoholism, clinical and experimental research*. 1981;5(3):378-85.
19. Tyas SL. Alcohol use and the risk of developing Alzheimer's disease. *Alcohol research & health : the journal of the National Institute on Alcohol Abuse and Alcoholism*. 2001;25(4):299-306.
20. Munoz M, Ausin B, Santos-Olmo AB, Harter M, Volkert J, Schulz H, et al. Alcohol use, abuse and dependence in an older European population: Results from the MentDis_ICF65+ study. *PloS one*. 2018;13(4):e0196574.

- 1
2
3 384 21. Snow WM, Murray R, Ekuma O, Tyas SL, Barnes GE. Alcohol use and cardiovascular health
4 385 outcomes: a comparison across age and gender in the Winnipeg Health and Drinking Survey Cohort.
5 386 Age and ageing. 2009;38(2):206-12.
- 6 387 22. Immonen S, Valvanne J, Pitkala KH. The prevalence of potential alcohol-drug interactions in
7 388 older adults. Scandinavian journal of primary health care. 2013;31(2):73-8.
- 8 389 23. Onder G, Landi F, Della Vedova C, Atkinson H, Pedone C, Cesari M, et al. Moderate alcohol
9 390 consumption and adverse drug reactions among older adults. Pharmacoepidemiology and Drug Safety.
10 391 2002;11(5):385-92.
- 11 392 24. Harford TC, Grant BF, Yi HY, Chen CM. Patterns of DSM-IV alcohol abuse and dependence
12 393 criteria among adolescents and adults: results from the 2001 National Household Survey on Drug
13 394 Abuse. Alcoholism, clinical and experimental research. 2005;29(5):810-28.
- 14 395 25. Boscarino JA, Moorman AC, Rupp LB, Zhou Y, Lu M, Teshale EH, et al. Comparison of ICD-9
15 396 Codes for Depression and Alcohol Misuse to Survey Instruments Suggests These Codes Should Be Used
16 397 with Caution. Digestive diseases and sciences. 2017;62(10):2704-12.
- 17 398 26. Conigliaro J, Kraemer K, McNeil M. Screening and identification of older adults with alcohol
18 399 problems in primary care. Journal of geriatric psychiatry and neurology. 2000;13(3):106-14.
- 19 400 27. Hajat S, Haines A, Bulpitt C, Fletcher A. Patterns and determinants of alcohol consumption in
20 401 people aged 75 years and older: results from the MRC trial of assessment and management of older
21 402 people in the community. Age and ageing. 2004;33(2):170-7.
- 22 403 28. Ortola R, Garcia-Esquinas E, Leon-Munoz LM, Guallar-Castillon P, Valencia-Martin JL, Galan I,
23 404 et al. Patterns of Alcohol Consumption and Risk of Frailty in Community-dwelling Older Adults. The
24 405 journals of gerontology Series A, Biological sciences and medical sciences. 2016;71(2):251-8.
- 25 406 29. Hirata ES, Almeida OP, Funari RR, Klein EL. Alcoholism in a geriatric outpatient clinic of Sao
26 407 Paulo-Brazil. International psychogeriatrics. 1997;9(1):95-103.
- 27 408 30. Di Bari M, Silvestrini G, Chiarlone M, De Alfieri W, Patussi V, Timpanelli M, et al. Features of
28 409 excessive alcohol drinking in older adults distinctively captured by behavioral and biological screening
29 410 instruments: An epidemiological study. Journal of clinical epidemiology. 2002;55(1):41-7.
- 30 411 31. Nelson DE, Sattin RW, Langlois JA, DeVito CA, Stevens JA. Alcohol as a risk factor for fall injury
31 412 events among elderly persons living in the community. Journal of the American Geriatrics Society.
32 413 1992;40(7):658-61.
- 33 414 32. van der Pol V, Rodgers H, Aitken P, James O, Curless R. Does alcohol contribute to accident and
34 415 emergency department attendance in elderly people? Journal of accident & emergency medicine.
35 416 1996;13(4):258-60.
- 36 417 33. Reid MC, Concato J, Towle VR, Williams CS, Tinetti ME. Alcohol use and functional disability
37 418 among cognitively impaired adults. Journal of the American Geriatrics Society. 1999;47(7):854-9.
- 38 419 34. Woods AJ, Porges EC, Bryant VE, Seider T, Gongvatana A, Kahler CW, et al. Current Heavy
39 420 Alcohol Consumption is Associated with Greater Cognitive Impairment in Older Adults. Alcoholism,
40 421 clinical and experimental research. 2016;40(11):2435-44.
- 41 422 35. Administration NHTS. National Institute on Alcohol Abuse and Alcoholism.(2000). Sentencing
42 423 and Disposition of Youth DUI and Other Alcohol Offenses: A Guide for Judges and Prosecutors,
43 424 Washington, DC. 2006.
- 44 425 36. Grant BF, Chou SP, Saha TD, Pickering RP, Kerridge BT, Ruan WJ, et al. Prevalence of 12-Month
45 426 Alcohol Use, High-Risk Drinking, and DSM-IV Alcohol Use Disorder in the United States, 2001-2002 to
46 427 2012-2013: Results From the National Epidemiologic Survey on Alcohol and Related Conditions. JAMA
47 428 psychiatry. 2017;74(9):911-23.
- 48 429 37. Valderas JM, Starfield B, Sibbald B, Salisbury C, Roland M. Defining comorbidity: implications
49 430 for understanding health and health services. Ann Fam Med. 2009;7(4):357-63.
- 50 431 38. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and
51 432 age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication.
52 433 Archives of general psychiatry. 2005;62(6):593-602.
- 53 434 39. Moher D, Liberati A, Tetzlaff J, Altman DG, Group P. Preferred reporting items for systematic
54 435 reviews and meta-analyses: the PRISMA statement. PLoS medicine. 2009;6(7):e1000097.

- 1
2
3 436 40. Zorzela L, Loke YK, Ioannidis JP, Golder S, Santaguida P, Altman DG, et al. PRISMA harms
4 437 checklist: improving harms reporting in systematic reviews. *BMJ (Clinical research ed)*. 2016;352:i157.
5 438 41. DF S, Berlin JA, Morton SC, Olkin I, Williamson GD, Rennie D. Meta-analysis of observational
6 439 studies in epidemiology: a proposal for reporting. *Meta-analysis Of Observational Studies in*
7 440 *Epidemiology (MOOSE) group. Jama*. 2008.
8 441 42. J. H, S. G. *The Cochrane handbook for systematic reviews of interventions*. Cb s e, editor.
9 442 Chichester, UK: John Wiley & Sons, Ltd; 2008.
10 443 43. P. S. What is a non-randomised controlled trial? *British Medical Journal*. 2014;348.
11 444 44. Ferriter M, N. H. Does the non-randomized controlled study have a place in the systematic
12 445 review? A pilot study. *Criminal behaviour and mental health*. 2005;15(2):111-20.
13 446 45. Elderly population [Internet]. WHO. 2019. Available from:
14 447 http://www.searo.who.int/entity/health_situation_trends/data/chi/elderly-population/en/.
15 448 46. Hasin DS, Stinson FS, Ogburn E, Grant BF. Prevalence, correlates, disability, and comorbidity of
16 449 dsm-iv alcohol abuse and dependence in the united states: Results from the national epidemiologic
17 450 survey on alcohol and related conditions. *Archives of general psychiatry*. 2007;64(7):830-42.
18 451 47. Gunzerath L, Faden V, Zakhari S, Warren K. National Institute on Alcohol Abuse and Alcoholism
19 452 Report on Moderate Drinking. *Alcoholism: Clinical and Experimental Research*. 2004;28(6):829-47.
20 453 48. Hasin DS, Stinson FS, Ogburn E, Grant BF. Prevalence, correlates, disability, and comorbidity of
21 454 DSM-IV alcohol abuse and dependence in the United States: results from the National Epidemiologic
22 455 Survey on Alcohol and Related Conditions. *Archives of general psychiatry*. 2007;64(7):830-42.
23 456 49. Barnes AJ, Moore AA, Xu H, Ang A, Tallen L, Mirkin M, et al. Prevalence and correlates of at-
24 457 risk drinking among older adults: the project SHARE study. *Journal of general internal medicine*.
25 458 2010;25(8):840-6.
26 459 50. Novy J, Castelao E, Preisig M, Vidal PM, Waeber G, Vollenweider P, et al. Psychiatric co-
27 460 morbidity and cardiovascular risk factors in people with lifetime history of epilepsy of an urban
28 461 community. *Clin Neurol Neurosurg*. 2012;114(1):26-30.
29 462 51. Preisig M, Waeber G, Vollenweider P, Bovet P, Rothen S, Vandeleur C, et al. The PsyCoLaus
30 463 study: methodology and characteristics of the sample of a population-based survey on psychiatric
31 464 disorders and their association with genetic and cardiovascular risk factors. *BMC Psychiatry*.
32 465 2009;9(1):9.
33 466 52. Firmann M, Mayor V, Vidal PM, Bochud M, Pecoud A, Hayoz D, et al. The CoLaus study: a
34 467 population-based study to investigate the epidemiology and genetic determinants of cardiovascular
35 468 risk factors and metabolic syndrome. *BMC Cardiovasc Disord*. 2008;8:6.
36 469 53. Moher D, Liberati A, Tetzlaff J, Altman D, Group ftP. Preferred reporting items for systematic
37 470 reviews and meta-analyses: the PRISMA statement. *BMJ*. 2009;339:b2535.
38 471 54. Mansournia MA, Higgins JP, Sterne JA, Hernan MA. Biases in Randomized Trials: A
39 472 Conversation Between Trialists and Epidemiologists. *Epidemiology (Cambridge, Mass)*. 2017;28(1):54-
40 473 9.
41 474 55. Sterne JA, Hernán MA, Reeves BC, Savović J, Berkman ND, Viswanathan M, et al. ROBINS-I: a
42 475 tool for assessing risk of bias in non-randomised studies of interventions. *BMJ*. 2016;355.
43 476 56. Higgins J, Green S. *The Cochrane handbook for systematic reviews of interventions*. Cb s,
44 477 editor. Chichester, UK: John Wiley & Sons, Ltd; 2008.
45 478 57. Moher D, Liberati A, Tetzlaff J, Altman DG, The PG. Preferred Reporting Items for Systematic
46 479 Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med*. 2009;6(7):e1000097.
47 480 58. Riley RD, Higgins JP, Deeks JJ. Interpretation of random effects meta-analyses. *BMJ (Clinical*
48 481 *research ed)*. 2011;342:d549.
49 482 59. Lau J, Ioannidis J, Terrin N, Schmid C, I. O. The case of the misleading funnel plot. *BMJ (Clinical*
50 483 *research ed)*. 2006;333:597-600.
51 484 60. Chiolero A, Santschi V, Burnand B, Platt RW, Paradis G. Meta-analyses: with confidence or
52 485 prediction intervals? *European Journal of Epidemiology*. 2012;27:823-5.
53 486 61. Borenstein M, Hedges LV, Higgins JPT, Rothstein HR. Prediction intervals: Introduction to Meta-
54 487 Analysis. In: Ltd JWS, editor. Chichester, UK2009. p. 127-33.

- 1
2
3 488 62. Fink A, Morton SC, Beck JC, Hays RD, Spritzer K, Oishi S, et al. The alcohol-related problems
4 489 survey: identifying hazardous and harmful drinking in older primary care patients. Journal of the
5 490 American Geriatrics Society. 2002;50(10):1717-22.
6 491 63. Jones TV, Lindsey BA, Yount P, Soltys R, Farani-Enayat B. Alcoholism screening questionnaires:
7 492 are they valid in elderly medical outpatients? Journal of general internal medicine. 1993;8(12):674-8.
8 493 64. Suwala M, Gerstenkorn A. [Detection of alcohol problems among elderly people]. Psychiatria
9 494 polska. 2007;41(5):703-13.
10 495 65. Krokstad S, Langhammer A, Hveem K, Holmen T, Midthjell K, Stene T, et al. Cohort Profile: The
11 496 HUNT Study, Norway. International journal of epidemiology. 2012;42(4):968-77.
12 497 66. Zeng Y. Towards Deeper Research and Better Policy for Healthy Aging --Using the Unique Data
13 498 of Chinese Longitudinal Healthy Longevity Survey. China Economic J. 2012;5(2-3):131-49.

16 499

500 Authors' contributions

19 501 ML is the guarantor, and all the authors contributed to drafting the protocol. All authors
20 502 will contribute to the development of the selection criteria, data extraction and analysis,
21 503 and the search strategy. JPS, HV, KE and AvG provided expertise on evidence-based
22 504 practice. All the authors approved the final protocol manuscript.

505 Funding

26 506 This research received no specific grant from any funding agency in the public,
27 507 commercial or not-for-profit sectors.

508 Conflicts of Interest

30 509 All authors declare no conflicts of interest.

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3 512 Table 1: Results of the search strategy in the selected databases
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For peer review only

**EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES OF INTEREST AMONG COMMUNITY-DWELLING
OLDER ADULTS: a protocol for a systematic review***

Section and topic	Item No	Checklist item	Page no.
ADMINISTRATIVE INFORMATION			
PPTitle:			
Identification	1a	Identify the report as a protocol of a systematic review	Page 1
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	Page 1
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	
Authors:			
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	Page 1-2
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	Page 13
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	Suppl.5
Support:			
Sources	5a	Indicate sources of financial or other support for the review	Page 13
Sponsor	5b	Provide name for the review funder and/or sponsor	NA
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	Page 13
INTRODUCTION			
Rationale	6	Describe the rationale for the review in the context of what is already known	Page 3-4
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	Page 4
METHODS			
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	Page 5-6
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	Page 6-7 + Suppl.3
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	Suppl. 3
Study records:			

Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	Page 6-7
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	Page 7
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	Page 7
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	Page 7
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	Page 6
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	Page 7-8
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	Page 8
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2 , Kendall's τ)	Page 8
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	Page 8
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	Page 8
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	NA
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	Page 8

Source: Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart L, PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. *BMJ*. 2015 Jan 2;349(jan02 1):g7647.

Epidemiology of at risk alcohol use and associated comorbidities of interest among home dwelling older and very old adults: a systematic review

Document de travail_V8_02.09.2019

Recherche effectuée par Joëlle ROSSELET AMOUSSOU, Psychiatry library, Education and Research Department, Lausanne University Hospital and University of Lausanne, Site de Cery, 1008 Prilly, Lausanne, Switzerland.	à l'attention de Maria LATANIOTI, Equipe mobile de la personne âgée, Département de psychiatrie du CHUV.	
Recherche révisée par Cécile Jaques et Jolanda Elmers, Medical Library, Education and Research Department, Lausanne University Hospital and University of Lausanne, Switzerland.	le 30 août 2019	
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Question de recherche

Question originale (formulaire demande)	Epidemiology of at risk alcohol use and associated comorbidities of interest among home dwelling older and very old adults
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1. Articles d'intérêt (Protocole_version_05.07.2019)

PubMed	16021662[uid] OR 9741947[uid] OR 10894315[uid] OR 17302657[uid] OR 8751316[uid] OR 14500441[uid] OR 7025691[uid] OR 11910708[uid] OR 19131359[uid] OR 12271880[uid] OR 15897727[uid] OR 28879547[uid] OR 11001132[uid] OR 14960434[uid] OR 26297937[uid] OR 9195283[uid] OR 8832344[uid] OR 10404931[uid] OR 27658235[uid] OR 17606817[uid] OR 15201626[uid] OR 12366628[uid] OR 8120683[uid]
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2. Recherche préliminaire de revues systématiques

Embase.com

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

('aged'/de OR 'very elderly'/exp OR (elder* OR eldest OR geriatri* OR "old age*" OR "oldest old*" OR senior* OR senium OR "very old*" OR septuagenarian* OR octagenarian* OR octogenarian* OR nonagenarian* OR centarian* OR centenarian* OR supercentenarian* OR ((old OR older) NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR (aged NEXT/1 (patient OR people OR person OR subject))):ab,ti) AND ('alcoholism'/exp OR 'drinking behavior'/exp OR 'alcohol consumption'/exp OR 'alcohol abuse'/exp OR 'alcohol intoxication'/exp OR (alcohol* OR drink* OR drunk* OR ethanol):ab,ti) AND ('community care'/exp OR 'ambulatory care'/exp OR 'outpatient'/exp OR 'outpatient department'/exp OR 'day care'/exp OR 'primary health care'/exp OR 'health center'/exp OR 'home care'/exp OR (home OR homecare OR home-care OR home-based OR homebound OR home-bound OR "living alone" OR domiciliary OR "day patient*" OR community OR "preventive health" OR "preventive service" OR ambulatory OR outpatient* OR "out patient*" OR out-patient* OR (day NEXT/1 (clinic OR hospital)) OR daycare OR (day NEXT/1 (care OR center)) OR (primary NEXT/3 (care OR healthcare)) OR "first line care" OR "health center*" OR domestic):ab,ti) AND ([cochrane review]/lim OR [systematic review]/lim OR [meta analysis]/lim)

93	références trouvées le	2 septembre 2019
Commentaire(s) :	Filtre EBM : ([cochrane review]/lim OR [systematic review]/lim OR [meta analysis]/lim)	

Epistomonikos

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(alcohol* OR drink*) AND (elder* OR geriatri* OR aged OR old OR ageing)

9	références trouvées le	2 septembre 2019
Commentaire(s) :	Filtre Publication type : Systematic Review	

Cochrane Library Wiley

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(alcohol* OR drink*) AND (elder* OR geriatri* OR aged OR old OR ageing)

(alcohol* OR drink* OR drunk* OR ethanol) AND (incidence OR prevalence OR epidemiolog* OR morbidit*)

1	références trouvées le	2 septembre 2019
Commentaire(s) :		

Prospero

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

((alcohol* OR dirnk*) AND (elder* OR geriatri* OR aged OR old OR ageing)):TI AND (Epidemiologic OR Systematic Review OR Meta-Analysis OR PMA OR Review of Reviews):RT

5	références trouvées le	2 septembre 2019
Commentaire(s) :	Filtre (Epidemiologic OR Systematic Review OR Meta-Analysis OR PMA OR Review of Reviews):RT	

3. Sources de données exploitées

Embase.com

Medline Ovid SP

PubMed

CINAHL EBSCO

PsycINFO Ovid SP

CENTRAL - Cochrane Library Wiley

Web of Science – Core collection

4. Vocabulaire

Concepts choisis	Aged	Alcohol	Comorbidity	Epidemiology + Study designs reporting prevalence and incidence data
Mots libres Syntaxe Embase	elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing	(alcohol* OR drunk*):ab,ti,kw OR (drink*):ab,ti,kw NOT ('dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de OR (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*)):ab,ti,kw))	(comorbid* OR comorbid* OR co-occurr* OR coocurr* OR ((disease* OR sickness*) NEAR/2 associat*)):ab,ti,kw OR (hypertension OR "blood pressure*" OR hypertensive):ab,ti,kw OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) NEXT/3 disorder*)):ab,ti,kw OR (pain OR pains OR "physical suffering*" OR ache OR aches):ab,ti,kw OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis):ab,ti,kw OR ((sleep NEAR/3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*):ab,ti,kw OR (((cognition OR neurocognitive OR consciousness) NEXT/3 disorder*) OR (cognitive NEXT/3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic	epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort OR "case-control stud*" OR ("cross sectional" NEXT/3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective NEXT/3 (study OR studies OR design)) OR survey OR surveys OR screening

			psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*):ab,ti,kw OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*"):ab,ti,kw OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*"):ab,ti,kw	
Emtree	'aged'/de OR 'frail elderly'/de OR 'very elderly'/exp OR 'elderly care'/de OR 'geriatric care'/exp OR 'geriatric patient'/de OR 'geriatrics'/exp	'alcoholism'/exp OR 'drinking behavior'/exp OR 'alcohol consumption'/exp OR 'alcohol abuse'/exp NOT 'dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de	'comorbidity'/de OR 'comorbidity assessment'/exp OR 'disease association'/de OR 'hypertension'/exp OR 'mood disorder'/exp OR 'pain'/exp OR 'liver disease'/exp OR 'sleep disorder'/exp OR 'insomnia'/exp OR 'cognitive defect'/exp OR 'diabetes mellitus'/exp OR 'anxiety disorder'/exp	'epidemiology'/de OR 'epidemiology'/lnk OR 'health survey'/exp OR 'incidence'/de OR 'prevalence'/de OR 'morbidity'/de OR 'population'/exp OR 'population research'/de OR 'population risk'/de OR 'population statistics'/exp OR 'screening'/de OR 'mass screening'/de OR 'cohort analysis'/de OR 'case control study'/de OR 'population based case control study'/de OR 'cross-sectional study'/de OR 'follow up'/de OR 'longitudinal study'/de OR 'retrospective study'/de
MeSH	exp Aged/ OR "Geriatric Nursing"/ OR "Geriatric Assessment"/ OR "Geriatrics"/ OR "Geriatric Psychiatry"	alcoholism/ OR drinking behavior/ OR binge drinking/ OR alcohol drinking/ NOT exp "Deglutition Disorders"/ OR "Drinking"/ OR "Drinking Water"	"Comorbidity"/ OR exp "Hypertension"/ OR exp "Mood Disorders"/ OR exp "Pain"/ OR exp "Liver Diseases"/ OR exp "Sleep Wake Disorders"/ OR exp "Cognition Disorders"/ OR "Cognitive Dysfunction"/ OR exp "Dementia"/ OR exp "Diabetes Mellitus"/ OR exp "Anxiety Disorders"/	"Epidemiology"/ OR exp "Epidemiologic Methods"/ OR "epidemiology".fs. OR "Incidence"/ OR "Prevalence"/ OR "Morbidity"/ OR "Health Surveys"/ OR exp "Population Surveillance"/ OR "Epidemiologic Measurements"/ OR exp "Population"/ OR exp "Epidemiologic Methods"/ OR "Mass

				Screening"/ OR exp "Epidemiologic Studies"/
CINAHL	MH "Aged" OR MH "Aged, 80 and Over" OR MH "Frail Elderly" OR MH "Gerontologic Nursing+" OR MH "Geriatric Assessment+" OR MH "Geriatrics" OR MH "Geriatric Psychiatry"	MH "Alcoholism" OR MH "Alcohol Abuse+" OR MH "Drinking Behavior+" OR MH "Alcohol Drinking" OR MH "Binge Drinking" NOT MH "Deglutition Disorders" OR MH "Water Supply" OR MH "Fluid Intake"	MH "Comorbidity" OR MH "Hypertension+" OR MH "Affective Disorders+" OR MH "Pain+" OR MH "Liver Diseases+" OR MH "Sleep Disorders+" OR MH "Cognition Disorders+" OR MH "Dementia+" OR MH "Diabetes Mellitus+" OR MH "Anxiety Disorders+"	MH "Epidemiology+" OR MW epidemiology OR MH "Incidence" OR MH "Prevalence" OR MH "Morbidity" OR MH "Epidemiological Research" OR MH "Population" OR MH "Rural Population" OR MH "Suburban Population" OR MH "Urban Population" OR MH "Health Screening" OR MH "Prospective Studies+" OR MH "Case Control Studies" OR MH "Population-Based Case Control" OR MH "Cross Sectional Studies"
PsycINFO	geriatrics/ OR geriatric assessment/ OR geriatric patients/ OR geriatric psychiatry/ OR elder care/ OR aging in place/	exp alcohol abuse/ OR drinking behavior/ OR alcohol drinking patterns/ NOT dysphagia/ OR exp fluid intake/	comorbidity/ OR exp hypertension/ OR exp affective disorders/ OR exp pain/ OR pain measurement/ OR exp liver disorders/ OR exp sleep disorders/ OR cognitive impairment/ OR exp dementia/ OR exp diabetes mellitus/ OR exp anxiety disorders/	epidemiology/ OR exp population/ OR screening/ OR health screening/ OR cohort analysis/ OR followup studies/ OR exp longitudinal studies/ OR retrospective studies/

Concept Alcohol

Pour enlever du bruit avec "drink*" en terme libre, nous avons exclu les références associées à "dysphagia", "drinking water", etc.

Exemple avec la syntaxe de la base de données Embase.com :

drink*:ab,ti,kw NOT ('dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de OR (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*))) :ab,ti,kw

Concept Epidemiology

Pour construire notre concept nous avons combiné les termes libres et les vedettes matières associées à l'épidémiologie, avec les types d'études pouvant nous apporter des données épidémiologiques.

Les articles de (Waffenschmidt, 2017) et (Workneh, 2017) nous ont inspiré pour l'élaboration de ce concept :

Waffenschmidt S, Hermanns T, Gerber-Grote A, Mostardt S. No suitable precise or optimized epidemiologic search filters were available for bibliographic databases. *J Clin Epidemiol.* 2017 Feb;82:112-118. doi: 10.1016/j.jclinepi.2016.08.008. Epub 2016 Aug 26. PubMed [PMID: 27570049](https://pubmed.ncbi.nlm.nih.gov/27570049/).

Workneh MH, Bjune GA, Yimer SA. Prevalence and associated factors of tuberculosis and diabetes mellitus comorbidity: A systematic review. PLoS One. 2017 Apr 21;12(4):e0175925. doi: 10.1371/journal.pone.0175925. eCollection 2017. Review. PubMed [PMID: 28430796](https://pubmed.ncbi.nlm.nih.gov/28430796/).

5. Stratégies de recherche pour les bases de données

Embase.com

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

('aged'/de OR 'frail elderly'/de OR 'very elderly'/exp OR 'elderly care'/de OR 'geriatric care'/exp OR 'geriatric patient'/de OR 'geriatrics'/exp OR (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing):ab,ti,kw) AND ('alcoholism'/exp OR 'drinking behavior'/exp OR 'alcohol consumption'/exp OR 'alcohol abuse'/exp OR (alcohol* OR drunk*):ab,ti,kw OR (drink*:ab,ti,kw NOT ('dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de OR (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*)):ab,ti,kw))) AND ('comorbidity'/de OR 'comorbidity assessment'/exp OR 'disease association'/de OR (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) NEAR/2 associat*)):ab,ti,kw OR 'hypertension'/exp OR (hypertension OR "blood pressure*" OR hypertensive):ab,ti,kw OR 'mood disorder'/exp OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) NEXT/3 disorder*)):ab,ti,kw OR 'pain'/exp OR (pain OR pains OR "physical suffering*" OR ache OR aches):ab,ti,kw OR 'liver disease'/exp OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis):ab,ti,kw OR 'sleep disorder'/exp OR 'insomnia'/exp OR ((sleep NEAR/3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*):ab,ti,kw OR 'cognitive defect'/exp OR (((cognition OR neurocognitive OR consciousness) NEXT/3 disorder*) OR (cognitive NEXT/3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*):ab,ti,kw OR 'diabetes mellitus'/exp OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*"):ab,ti,kw OR 'anxiety disorder'/exp OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*"):ab,ti,kw) AND ('epidemiology'/de OR 'epidemiology'/lnk OR 'health survey'/exp OR 'incidence'/de OR 'prevalence'/de OR 'morbidity'/de OR 'population'/exp OR 'population research'/de OR 'population risk'/de OR 'population statistics'/exp OR 'screening'/de OR 'mass screening'/de OR (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort):ab,ti,kw OR 'cohort analysis'/de OR 'case control study'/de OR 'population based case control study'/de OR 'cross-sectional study'/de OR 'follow up'/de OR 'longitudinal study'/de OR 'retrospective study'/de OR ("case-control stud*" OR ("cross sectional" NEXT/3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective NEXT/3 (study OR studies OR design)) OR survey OR surveys OR screening):ab,ti,kw) NOT (([conference abstract]/lim AND [<1966-2016]/py) NOT ([animals]/lim NOT [humans]/lim))

24'828	références trouvées le	2 septembre 2019
Commentaire(s) :	Nous avons exclu les références des "conferences abstracts" avant 2017, partant du principe qu'elles ont fait l'objet d'une publication. Limites utilisées : NOT ([conference abstract]/lim AND [<1966-2016]/py) NOT ([animals]/lim NOT [humans]/lim)	

Medline Ovid SP

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to April 11, 2019

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#) (décocher case "Map Term to Subject Heading")

(exp Aged/ OR "Geriatric Nursing"/ OR "Geriatric Assessment"/ OR "Geriatrics"/ OR Geriatric Psychiatry/ OR (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older ADJ1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing).ab,ti,kf.) AND (alcoholism/ OR drinking behavior/ OR binge drinking/ OR alcohol drinking/ OR (alcohol* OR drunk*).ab,ti,kf. OR (drink*.ab,ti,kf. NOT (exp "Deglutition Disorders"/ OR "Drinking"/ OR "Drinking Water" OR (deglutition-disorder* OR dysphagia* OR (water ADJ1 drink*).ab,ti,kf.))) AND ("Comorbidity"/ OR (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) ADJ2 associat*).ab,ti,kf. OR exp "Hypertension"/ OR (hypertension OR "blood pressure*" OR hypertensive).ab,ti,kf. OR exp "Mood Disorders"/ OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) ADJ3 disorder*).ab,ti,kf. OR exp "Pain"/ OR (pain OR pains OR "physical suffering*" OR ache OR aches).ab,ti,kf. OR exp "Liver Diseases"/ OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis).ab,ti,kf. OR exp "Sleep Wake Disorders"/ OR ((sleep ADJ3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*).ab,ti,kf. OR exp "Cognition Disorders"/ OR "Cognitive Dysfunction"/ OR exp "Dementia"/ OR (((cognition OR neurocognitive OR consciousness) ADJ3 disorder*) OR (cognitive ADJ3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*).ab,ti,kf. OR exp "Diabetes Mellitus"/ OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*").ab,ti,kf. OR exp "Anxiety Disorders"/ OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*").ab,ti,kf.) AND ("Epidemiology"/ OR exp "Epidemiologic Methods"/ OR "epidemiology".fs. OR "Incidence"/ OR "Prevalence"/ OR "Morbidity"/ OR "Health Surveys"/ OR exp "Population Surveillance"/ OR "Epidemiologic Measurements"/ OR exp "Population"/ OR exp "Epidemiologic Methods"/ OR "Mass Screening"/ OR (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort).ab,ti,kf. OR exp "Epidemiologic Studies"/ OR ("case-control stud*" OR ("cross sectional" ADJ3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective ADJ3 (study OR studies OR design)) OR survey OR surveys OR screening).ab,ti,kf.) NOT (animals NOT humans).sh.

22'765	références trouvées le	2 septembre 2019
Commentaire(s) :	Limite utilisée : NOT (animals NOT humans).sh.	

PubMed

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(elder*[tiab] OR eldest[tiab] OR geriatr*[tiab] OR "old aged"[tiab] OR "oldest old*"[tiab] OR "very old*"[tiab] OR older patient*[tiab] OR "older people"[tiab] OR older subject*[tiab] OR older age*[tiab] OR older adult*[tiab] OR "older man"[tiab] OR "older men"[tiab] OR older male*[tiab] OR "older woman"[tiab] OR "older women"[tiab] OR older female*[tiab] OR older population*[tiab] OR older person*[tiab] OR aging[tiab] OR ageing[tiab]) AND (alcohol*[tiab] OR drunk*[tiab] OR (drink*[tiab] NOT (deglutition-disorder*[tiab] OR dysphagia*[tiab] OR water drink*[tiab]))) AND (comorbid*[tiab] OR co-morbid*[tiab] OR co-occurr*[tiab] OR cooccurr*[tiab] OR ((disease*[tiab] OR sickness*[tiab]) AND associat*[tiab]) OR hypertension[tiab] OR blood pressure*[tiab] OR

hypertensive[tiab] OR mood disorder*[tiab] OR depression*[tiab] OR bipolar[tiab] OR depressive[tiab] OR dysthymia[tiab] OR melancholia[tiab] OR melancholy[tiab] OR mourning[tiab] OR ((dysthymic[tiab] OR affective[tiab] OR cyclothymic[tiab]) AND disorder*[tiab]) OR pain[tiab] OR pains[tiab] OR physical suffering*[tiab] OR ache[tiab] OR aches[tiab] OR liver[tiab] OR hepatic[tiab] OR hepatit*[tiab] OR hepatitis[tiab] OR hepatopathy[tiab] OR cirrhosis[tiab] OR (sleep[tiab] AND (disorder*[tiab] OR disturbance*[tiab] OR dysfunction*[tiab])) OR dyssomnia*[tiab] OR insomnia*[tiab] OR sleepless*[tiab] OR ((cognition[tiab] OR neurocognitive[tiab] OR consciousness[tiab]) AND disorder*[tiab]) OR (cognitive[tiab] AND (defect*[tiab] OR deficit*[tiab] OR disab*[tiab] OR disorder*[tiab] OR dysfunction*[tiab] OR impairment*[tiab])) OR dementia[tiab] OR executive dysfunction*[tiab] OR amnesia[tiab] OR korsakoff[tiab] OR huntington[tiab] OR delirium[tiab] OR alzheimer[tiab] OR "creutzfeldt jakob"[tiab] OR "kluver bucy"[tiab] OR "kluver bucy"[tiab] OR "lewy body"[tiab] OR "lewy bodies"[tiab] OR "alcoholic psychosis"[tiab] OR "toxic psychoses"[tiab] OR "amyotrophic lateral sclerosis"[tiab] OR "corticobasal degeneration"[tiab] OR multiple system atroph*[tiab] OR parkinson*[tiab] OR diabetes[tiab] OR diabetic*[tiab] OR prediabetic*[tiab] OR glucose intolerance*[tiab] OR anxiety[tiab] OR acute stress disorder*[tiab] OR distress syndrome*[tiab] OR "obsessive compulsive"[tiab] OR panic[tiab] OR phobia*[tiab] OR phobic disorder*[tiab] OR "posttraumatic stress"[tiab] OR "post-traumatic stress"[tiab] OR neurotic disorder*[tiab]) AND (epidemiol*[tiab] OR prevalen*[tiab] OR inciden*[tiab] OR morbidity[tiab] OR "general population"[tiab] OR "population based"[tiab] OR surveillance[tiab] OR cohort[tiab] OR case-control stud*[tiab] OR ("cross sectional" AND (study[tiab] OR studies[tiab] OR design[tiab] OR research[tiab])) OR follow-up stud*[tiab] OR followup stud*[tiab] OR longitudinal stud*[tiab] OR "longitudinal evaluation"[tiab] OR (retrospective[tiab] AND (study[tiab] OR studies[tiab] OR design[tiab])) OR survey[tiab] OR surveys[tiab] OR screening[tiab]) NOT medline[sb]

692	références trouvées le	2 septembre 2019
Commentaire(s) :	Recherche limitée aux références non indexées pour Medline : NOT medline[sb]	

CINAHL EBSCO

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(MH "Aged" OR MH "Aged, 80 and Over" OR MH "Frail Elderly" OR MH "Gerontologic Nursing+" OR MH "Geriatric Assessment+" OR MH "Geriatrics" OR MH "Geriatric Psychiatry" OR TI (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older W1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing) OR AB (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older W1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing)) AND (MH "Alcoholism" OR MH "Alcohol Abuse+" OR MH "Drinking Behavior+" OR MH "Alcohol Drinking" OR MH "Binge Drinking" OR TI (alcohol* OR drunk*) OR (TI (drink*) NOT (MH "Deglutition Disorders" OR MH "Water Supply" OR MH "Fluid Intake" OR TI (deglutition-disorder* OR dysphagia* OR (water N1 drink*)))) OR AB (alcohol* OR drunk*) OR (AB (drink*) NOT (MH "Deglutition Disorders" OR MH "Water Supply" OR MH "Fluid Intake" OR AB (deglutition-disorder* OR dysphagia* OR (water N1 drink*)))) AND (MH "Comorbidity" OR TI (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) N1 associat*)) OR AB (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) N1 associat*)) OR MH "Hypertension+" OR TI (hypertension OR "blood pressure*" OR hypertensive) OR AB (hypertension OR "blood pressure*" OR hypertensive) OR MH "Affective Disorders+" OR TI ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) W2 disorder*)) OR AB ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) W2 disorder*)) OR MH "Pain+" OR TI (pain OR pains OR "physical suffering*" OR ache OR aches) OR AB (pain OR pains OR "physical suffering*" OR ache OR aches) OR MH "Liver Diseases+" OR TI (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis) OR AB (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis) OR MH "Sleep Disorders+" OR TI ((sleep N2 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*) OR AB ((sleep N2 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*) OR MH "Cognition Disorders+" OR MH "Dementia+"

OR TI (((cognition OR neurocognitive OR consciousness) W2 disorder*) OR (cognitive W2 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*) OR AB (((cognition OR neurocognitive OR consciousness) W2 disorder*) OR (cognitive W2 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*) OR MH "Diabetes Mellitus+" OR TI (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*") OR AB (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*") OR MH "Anxiety Disorders+" OR TI (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*") OR AB (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*") AND (MH "Epidemiology+" OR MW epidemiology OR MH "Incidence" OR MH "Prevalence" OR MH "Morbidity" OR MH "Epidemiological Research" OR MH "Population" OR MH "Rural Population" OR MH "Suburban Population" OR MH "Urban Population" OR MH "Health Screening" OR TI (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort) OR AB (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort) OR MH "Prospective Studies+" OR MH "Case Control Studies" OR MH "Population-Based Case Control" OR MH "Cross Sectional Studies" OR TI ("case-control stud*" OR ("cross sectional" W2 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective W2 (study OR studies OR design)) OR survey OR surveys OR screening) OR AB ("case-control stud*" OR ("cross sectional" W2 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective W4 (study OR studies OR design)) OR survey OR surveys OR screening) NOT (MH "Animals" NOT MH "humans")

5624	références trouvées le	2 septembre 2019
Commentaire(s) :		

PsycINFO Ovid SP

PsycINFO 1806 to April Week 2 2019

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#) (décocher case "Map Term to Subject Heading")

(geriatrics/ OR geriatric assessment/ OR geriatric patients/ OR geriatric psychiatry/ OR elder care/ OR aging in place/ OR (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older ADJ1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing).ab,ti.) AND (exp alcohol abuse/ OR drinking behavior/ OR alcohol drinking patterns/ OR (alcohol* OR drunk*).ab,ti. OR (drink*.ab,ti. NOT (dysphagia/ OR exp fluid intake/ OR (deglutition-disorder* OR dysphagia* OR (water ADJ1 drink*).ab,ti.))) AND (comorbidity/ OR (comorbid* OR comorbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) ADJ2 associat*).ab,ti. OR exp hypertension/ OR (hypertension OR "blood pressure*" OR hypertensive).ab,ti. OR exp affective disorders/ OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) ADJ3 disorder*).ab,ti. OR exp pain/ OR pain measurement/ OR (pain OR pains OR "physical suffering*" OR ache OR aches).ab,ti. OR exp liver disorders/ OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis).ab,ti. OR exp sleep disorders/ OR ((sleep ADJ3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*).ab,ti. OR cognitive impairment/ OR exp dementia/ OR (((cognition OR neurocognitive OR consciousness) ADJ3 disorder*) OR (cognitive ADJ3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR

"kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*).ab,ti. OR exp diabetes mellitus/ OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*").ab,ti. OR exp anxiety disorders/ OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*").ab,ti.) AND (epidemiology/ OR morbidity/ OR exp population/ OR screening/ OR health screening/ OR (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort).ab,ti. OR cohort analysis/ OR followup studies/ OR exp longitudinal studies/ OR retrospective studies/ OR ("case-control stud*" OR ("cross sectional" ADJ3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective ADJ3 (study OR studies OR design)) OR survey OR surveys OR screening).ab,ti.)

1380	références trouvées le	2 septembre 2019
Commentaire(s) :	Dans PsycInfo, "limit humans" ne fonctionne pas.	

Central - Cochrane Library Wiley

Cochrane Central Register of Controlled Trials

Issue 4 of 12, April 2019

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#) (puis sélectionner « Trials » sous « All Results »)

(elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing):kw,ti,ab AND ((alcohol* OR drunk*):kw,ti,ab OR (drink*:kw,ti,ab NOT (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*)):kw,ti,ab)) AND ((comorbid* OR comorbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) NEAR/2 associat*)):kw,ti,ab OR (hypertension OR "blood pressure*" OR hypertensive):kw,ti,ab OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) NEXT/3 disorder*)):kw,ti,ab OR (pain OR pains OR "physical suffering*" OR ache OR aches):kw,ti,ab OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis):kw,ti,ab OR ((sleep NEAR/3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*):kw,ti,ab OR (((cognition OR neurocognitive OR consciousness) NEXT/3 disorder*) OR (cognitive NEXT/3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*):kw,ti,ab OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*"):kw,ti,ab OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*"):kw,ti,ab) AND ((epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort):kw,ti,ab OR ("case-control stud*" OR ("cross sectional" NEXT/3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective NEXT/3 (study OR studies OR design)) OR survey OR surveys OR screening):kw,ti,ab)

413	références trouvées le	2 septembre 2019
Commentaire(s) :		

Web of Science – Core collection

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

TS=(elder* OR "eldest" OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR ("older" NEAR/1 (patient* OR "people" OR subject* OR age* OR adult* OR "man" OR "men" OR male* OR "woman" OR "women" OR female* OR population* OR person*)) OR "aging" OR "ageing") AND (TS=(alcohol* OR drunk*) OR (TS=(drink*) NOT TS=(deglutition-disorder* OR dysphagia* OR ("water" NEAR/1 drink*))) AND (TS=(comorbid* OR comorbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) NEAR/1 associat*)) OR TS=("hypertension" OR "blood pressure*" OR "hypertensive") OR TS=("mood disorder*" OR depression* OR "bipolar" OR "depressive" OR "dysthymia" OR "melancholia" OR "melancholy" OR "mourning" OR ((("dysthymic" OR "affective" OR "cyclothymic") NEAR/2 disorder*)) OR TS=("pain" OR "pains" OR "physical suffering*" OR "ache" OR "aches") OR TS=("liver" OR "hepatic" OR hepatit* OR "hepatis" OR "hepatopathy" OR "cirrhosis") OR TS=((("sleep" NEAR/2 (disorder* OR disturbance* OR dysfunction*)) OR dysomnia* OR insomnia* OR sleepless*) OR TS=((("cognition" OR "neurocognitive" OR "consciousness") NEAR/2 disorder*) OR ("cognitive" NEAR/2 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR "dementia" OR "executive dysfunction*" OR "amnesia" OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluver bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*) OR TS=("diabetes" OR diabetic* OR prediabetic* OR "glucose intolerance*") OR TS=("anxiety" OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR "panic" OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*")) AND (TS=(epidemiol* OR prevalen* OR inciden* OR "morbidity" OR "general population" OR "population based" OR "surveillance" OR "cohort") OR TS=("case-control stud*" OR ("cross sectional" NEAR/2 ("study" OR "studies" OR "design" OR "research")) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR ("retrospective" NEAR/2 ("study" OR "studies" OR "design")) OR "survey" OR "surveys" OR "screening"))

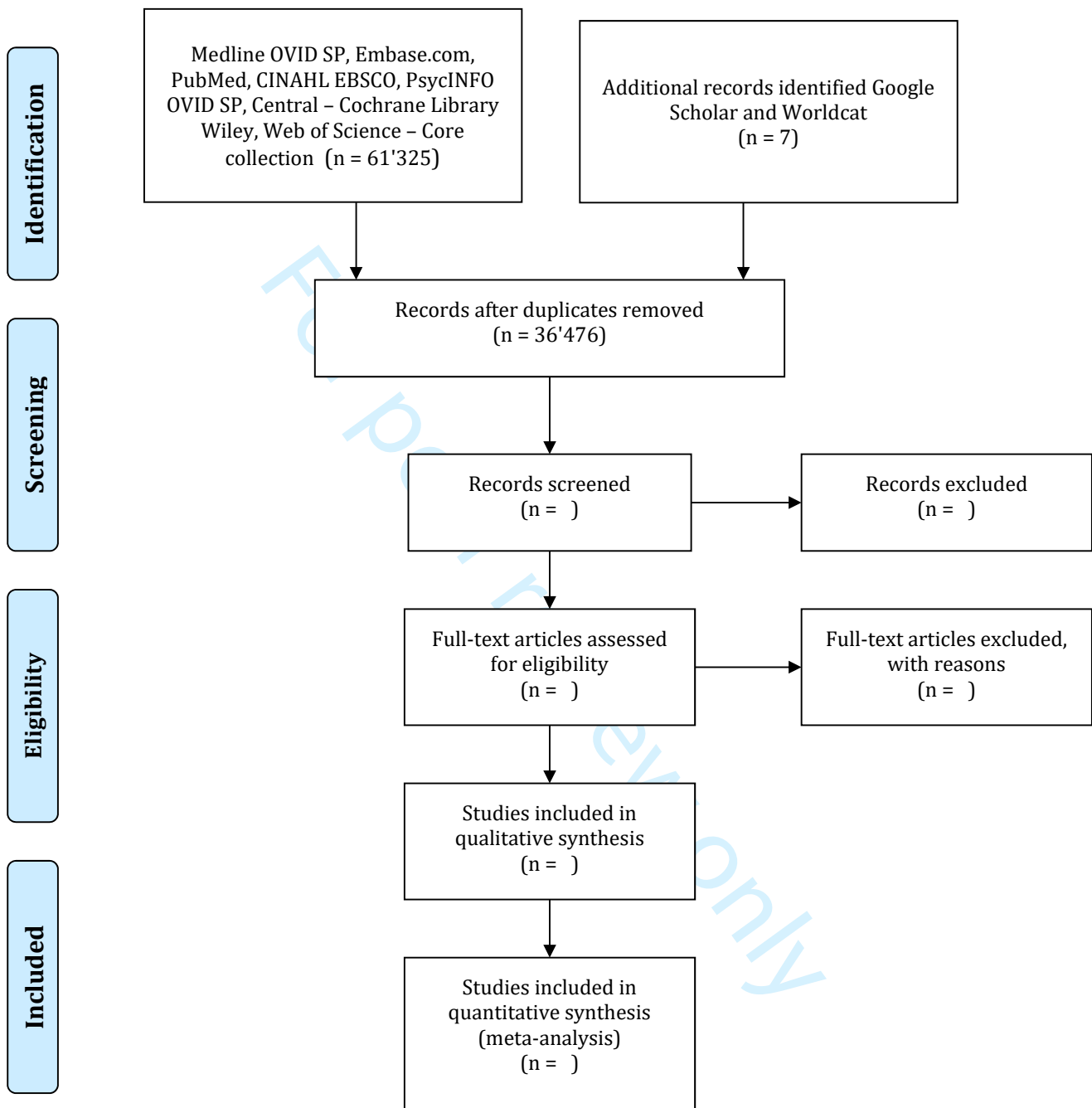
5623	références trouvées le	2 septembre 2019
Commentaire(s) :		

6. Résultats

L'ordre d'importation dans Endnote suit l'ordre ci-après :

Base de données	Date de la recherche	Nombre de références...	
		...trouvées...	...et après dédoublonnage
Medline OVID SP	02.09.19	22'765	22'760
Embase.com	02.09.19	24'828	11'186
PubMed	02.09.19	692	98
CINAHL EBSCO	02.09.19	5'624	843
PsycINFO OVID SP	02.09.19	1'380	296
Central – Cochrane Library Wiley	02.09.19	413	174
Web of Science – Core collection	02.09.19	5'623	1'119
Total		61'325	36'476

Suppl. 3



Source: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

Data extraction form - SECOND ROUND

EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES AMONG HOME-DWELLING OLDER ADULTS

General Information – Study ID:

Date form completed (dd/mm/yyyy):	Name person extracting data:
Publication title : <i>(title of paper/ abstract/ reports that data is extracted from):</i>	

Eligibility (exclude if one of the follow reference is unclear)

Study Characteristics	Inclusion Criteria	Yes/No/Unclear	Location in text (pg & ¶/fig/table)
Type of study	Randomised trial		
	Cluster randomised controlled trial (CRCT)		
	Non-randomised trial – Quasi experimental study		
	Retrospective or prospective epidemiological study		
	Cohort study		
	Controlled before-and-after study <ul style="list-style-type: none"> Contemporaneous data collection At least 2 intervention and 2 control clusters 		
	Interrupted time series OR repeated measures study <ul style="list-style-type: none"> At least 3 time-points before and 3 after the intervention Clearly defined intervention point 		
	Case-control study		
Language	French, German, English, Spanish and Chinese		
Participants	<ul style="list-style-type: none"> Home-dwelling adults a minimum mean age of 60 age (age minimum age 55 age) At least 1 alcoholic drink per day without acception (glas, onz 		
Types of intervention	Epidemiology (incidence – prevalence – occurrence) Measurement of at-risk drinking / alcoholism/alcohol abuse/alcohol		
Types of outcome measures	Primary outcome : <ul style="list-style-type: none"> Epidemiology of at-risk alcohol consumption, Age of onset Severity of alcohol use (amount). Secondary outcome measures: <ul style="list-style-type: none"> Psychiatric and somatic comorbidities frequently occurring in home-dwelling older adults with at-risk alcohol consumption; Documentation of tools and the measurement of comorbidities associated with at-risk drinking; Presence of epidemiological data on very old adults’ drinking habits; Associations between drinking volume and alcohol-related harm 		
Decision:	<input type="radio"/> Excluded <input type="radio"/> Included		
Reason for exclusion			
Notes:			

DO NOT PROCEED IF STUDY EXCLUDED FROM REVIEW

Definitions

Assumed risk estimate	An estimate of the risk of an event or average score without the intervention, used in Cochrane 'Summary of findings tables'. If a study provides useful estimates of the risk or average score of different subgroups of the population, or an estimate based on a representative observational study, you may wish to collect this information.
Bias	A systematic error or deviation in results or inferences from the truth. In studies of the effects of health care, the main types of bias arise from systematic differences in the groups that are compared (selection bias), the care that is provided, exposure to other factors apart from the intervention of interest (performance bias), withdrawals or exclusions of people entered into a study (attrition bias) or how outcomes are assessed (detection bias). Reviews of studies may also be particularly affected by reporting bias, where a biased subset of all the relevant data is available.
Change from baseline	A measure for a continuous outcome calculated as the difference between the baseline score and the post-intervention score.
Clusters	A group of participants who have been allocated to the same intervention arm together, as in a cluster-randomised trial, e.g. a whole family, town, school or patients in a clinic may be allocated to the same intervention rather than separately allocating each individual to different arms.
Co-morbidities	The presence of one or more diseases or conditions other than those of primary interest. In a study looking at treatment for one disease or condition, some of the individuals may have other diseases or conditions that could affect their outcomes.
Compliance	Participant behaviour that abides by the recommendations of a doctor, other health care provider or study investigator (also called adherence or concordance).
Contemporaneous data collection	When data are collected at the same point(s) in time or covering the same time period for each intervention arm in a study (that is, historical data are not used as a comparison).
Controlled Before and After Study (CBA)	A non-randomised study design where a control population of similar characteristics and performance as the intervention group is identified. Data are collected before and after the intervention in both the control and intervention groups
Exclusions	Participants who were excluded from the study or the analysis by the investigators.
Imputation	Assuming a value for a measure where the true value is not available (e.g. assuming last observation carried forward for missing participants).
Integrity of delivery	The degree to which the specified procedures or components of an intervention are delivered as originally planned.
Interrupted Time Series (ITS)	A research design that collects observations at multiple time points before and after an intervention (interruption). The design attempts to detect whether the intervention has had an effect significantly greater than the underlying trend.
Post-intervention	The value of an outcome measured at some time point following the beginning of the intervention (may be during or after the intervention period).
Power	In clinical trials, power is the probability that a trial will obtain a statistically significant result when the true intervention effect is a specified size. For a given size of effect, studies with more participants have greater power. Note that power should not be considered in the risk of bias assessment.
Providers	The person or people responsible for delivering an intervention and related care, who may or may not require specific qualifications (e.g. doctors, physiotherapists) or training.
Quasi-randomised controlled trial	A study in which the method of allocating people to intervention arms was not random, but was intended to produce similar groups when used to allocate participants. Quasi-random methods include: allocation by the person's date of birth, by the day of the week or month of the year, by a person's medical record number, or just allocating every alternate person.
Reanalysis	Additional analysis of a study's results by a review author (e.g. to introduce adjustment for correlation that was not done by the study authors).

Sociodemographics	Social and demographic information about a study or its participants, including economic and cultural information, location, age, gender, ethnicity, etc.
Theoretical basis	The use of a particular theory (such as theories of human behaviour change) to design the components and implementation of an intervention
Unit of allocation	The unit allocated to an intervention arm. In most studies individual participants will be allocated, but in others it may be individual body parts (e.g. different teeth or joints may be allocated separately) or clusters of multiple people.
Unit of analysis	The unit used to calculate N in an analysis, and for which the result is reported. This may be the number of individual people, or the number of body parts or clusters of people in the study.
Unit of measurement	The unit in which an outcome is measured, e.g. height may be measured in cm or inches; depression may be measured using points on a particular scale.
Validation	A process to test and establish that a particular measurement tool or scale is a good measure of that outcome.
Withdrawals	Participants who voluntarily withdrew from participation in a study before the completion of outcome measurement.

Methods

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
1. Aim of study		
2. Design (e.g. parallel, crossover, non-RCT)		
3. Unit of allocation (by individuals, cluster/groups or body parts)		
4. Start date		
5. End date		
6. Duration of participation (from recruitment to last follow-up)		
7. Notes:		

Population and setting – epidemiological data

	Description <i>Include comparative information for each group (i.e. intervention and controls) if available</i>	Location in text (pg & ¶/fig/table)
8. Population description (from which study participants are drawn)		
9. Baseline characteristics Sex Age SD / IQR Range Min-Max	Male:.....Female: Average:.....Median:	
10. Race / ethnicity		

	Description <i>Include comparative information for each group (i.e. intervention and controls) if available</i>	Location in text <i>(pg & ¶/fig/table)</i>
11. Setting <i>(including location and social context)</i>		
12. Inclusion criteria		
13. Exclusion criteria		
14. Recruitment of participants		
15. Length of follow-up		
16. Follow-up characteristics		
17. Target population and final number of subjects studied for outcome		

Participants

	Description as stated in report/paper	Location in text <i>(pg & /fig/table)</i>
18. Total number randomised <i>(or total pop. at start of study for NRCTs)</i>		
19. Clusters <i>(if applicable, no., type, no. people per cluster)</i>		
20. Baseline imbalances (if applicable)		
21. Withdrawals and exclusions <i>(if not provided below by the outcome)</i>		
22. Severity of illness		
23. Comorbidities		
24. Other treatments received <i>(additional to study intervention)</i>		
25. Other relevant socio-demographics		
26. Subgroups measured		
27. Subgroups reported		
28. Notes:		

Intervention groups

	Description as stated in report/paper	Location in text <i>(pg & ¶/fig/table)</i>
29. Group name		

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
30. No. randomised to group <i>(specify whether no. people or clusters)</i>		
31. Description <i>(include sufficient detail for replication, e.g. content, dose, components; if it is a natural experiment, describe the pre-intervention)</i>		
32. Duration of treatment period		
33. Timing <i>(e.g. frequency, duration of each episode)</i>		
34. Delivery <i>(e.g. mechanism, medium, intensity, fidelity)</i>		
35. Providers <i>(e.g. no., profession, training, ethnicity, etc. if relevant)</i>		
36. Co-interventions		
37. Economic variables <i>(i.e. intervention cost changes in other costs as result of intervention)</i>		
38. Resource requirements to replicate intervention <i>(e.g. staff numbers, cold chain, equipment)</i>		
39. Notes:		

Control Group

	Description as stated in report/paper	Location in text (pg & /fig/table)
40. Group name		
41. No. randomised to group <i>(specify whether no. people or clusters)</i>		
42. Description <i>(include sufficient detail for replication, e.g. content, dose, components; if it is a natural experiment, describe the pre-intervention)</i>		
43. Duration of treatment period		
44. Timing <i>(e.g. frequency, duration of each episode)</i>		
45. Delivery <i>(e.g. mechanism, medium, intensity, fidelity)</i>		
46. Providers <i>(e.g. no., profession, training, ethnicity, etc. if relevant)</i>		
47. Co-interventions		

	Description as stated in report/paper	Location in text (pg & /fig/table)
48. Economic variables (i.e. intervention cost, changes in other costs as result of intervention)		
49. Resource requirements to replicate intervention (e.g. staff numbers, cold chain, equipment)		
50. Notes:		

Outcomes

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
51. Outcome name		
52. Time-points measured (specify whether from start or end of intervention)		
53. Time-points reported		
54. Outcome definition (with diagnostic criteria if relevant and note whether the outcome is desirable or undesirable if this is not obvious)		
55. Person measuring/reporting		
56. Unit of measurement (if relevant)		
57. Scales: upper and lower limits (indicate whether high or low score is good)		
58. Is outcome/tool validated?	Yes/No/Unclear	
59. Imputation of missing data (e.g. assumptions made for Intention To Treat analysis)		
60. Assumed risk estimate (e.g. baseline or population risk noted in Background)		
61. Notes:		

Results

For randomised or non-randomised trial with dichotomous outcomes

	Description as stated in report/paper		Location in text (pg & /fig/table)	
62. Comparison				
63. Outcome				
64. Subgroup				
65. Time point (specify whether from start or end of intervention)				
66. Results Note whether:	Intervention		Comparison	
	No. events	No. participants	No. events	No. participants

	Description as stated in report/paper				Location in text (pg & /fig/table)
1 2 3 4 5 6 7	... post-intervention OR ... change from baseline And whether ... Adjusted OR ...Unadjusted				
8	67. Baseline data		Intervention	Comparison	
9		No. events	No. participants	No. events	No. participants
10					
11	68. No. missing participants and reasons				
12					
13	69. No. participants moved from other groups and reasons				
14					
15	70. Any other results reported				
16					
17	71. Unit of analysis (e.g. by individuals, health professionals, practice, hospital, community)				
18					
19	72. Statistical methods used and appropriateness of these methods (e.g. adjustment for correlation)				
20					
21	73. Reanalysis required? (if yes, specify why, e.g. correlation adjustment)				
22	...	Yes/No/Unclear			
23	74. Reanalysis possible?				
24	...	Yes/No/Unclear			
25	75. Reanalysed results				
26					
27	76. Notes:				
28					

For randomised or non-randomised trials with continuous outcomes

	Description as stated in report/paper						Location in text (pg & /fig/table)	
37	77. Comparison							
38								
39	78. Outcome							
40								
41	79. Subgroup							
42								
43	80. Time point (specify whether from start or end of intervention)							
44								
45	81. Post-intervention or change from the baseline?							
46								
47	82. Results Note whether:							
48	... post-intervention OR							
49	... change from baseline							
50	And whether							
51	... Adjusted OR							
52	...Unadjusted							
53		Intervention			Comparison			
54	Mean	SD (or other variance)	No. participants	Mean	SD (or other variance)	No. participants		
55								
56	83. Baseline data							
57	Intervention			Comparison				
58								

		Description as stated in report/paper					Location in text (pg & /fig/table)
	Mean	SD (or other variance)	No. participants	Mean	SD (or other variance)	No. participants	
84. No. missing participants and reasons							
85. No. participants moved from other groups and reasons							
86. Any other results reported							
87. Unit of analysis (e.g. by individuals, health professionals, practice, hospital, community)							
88. Statistical methods used and appropriateness of these methods (e.g. adjustment for correlation)							
89. Reanalysis required? (if yes, specify why)	...	Yes/No/Unclear					
90. Reanalysis possible?	...	Yes/No/Unclear					
91. Reanalysed results							
92. Notes:							

For randomised or non-randomised trial with other outcomes

		Description as stated in report/paper				Location in text (pg & ¶/fig/table)
93. Comparison						
94. Outcome						
95. Subgroup						
96. Time point (specify whether from start or end of intervention)						
97. Type of outcome						
98. Results	Intervention result	SD (or other variance)	Control result	SD (or other variance)		
	Overall results		SE (or other variance)			
99. No. participants	Intervention		Control			
100. No. missing participants and reasons						
101. No. participants moved from other groups and reasons						
102. Any other results reported						

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
103. Unit of analysis <i>(e.g. by individuals, health professionals, practice, hospital, community)</i>		
104. Statistical methods used and appropriateness of these methods		
105. Reanalysis required? <i>(if yes, specify why)</i>		
106. Reanalysis possible?		
107. Reanalysed results		
108. Notes:		

For controlled before–after studies

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
109. Comparison		
110. Outcome		
111. Subgroup		
112. Time point <i>(specify whether from start or end of intervention)</i>		
113. Post-intervention or change from the baseline?		
114. Results	Intervention result	SD (or other variance)
	Control result	SD (or other variance)
	Overall results	SE (or other variance)
115. No. participants	Intervention	Control
116. No. missing participants and reasons		
117. No. participants moved from other groups and reasons		
118. Any other results reported		
119. Unit of analysis <i>(e.g. by individuals, cluster/groups or body parts)</i>		
120. Statistical methods used and appropriateness of these methods		
121. Reanalysis required? <i>(specify)</i>	... Yes/No/Unclear	
122. Reanalysis possible?	... Yes/No/Unclear	
123. Reanalysed results		

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
124. Notes:		

For interrupted time series or repeated measures study

	Description as stated in report/paper	Location in text (pg & /fig/table)
125. Comparison		
126. Outcome		
127. Subgroup		
128. Length of time-points measured (e.g. days, months)		
Total period measured		
129. No. participants measured		
130. No. missing participants and reasons		
131. No. time-points measured	132. Pre-intervention	133. Post-intervention
134. Mean value (with variance measure)		
135. Difference in means (post-pre)		
136. Percentage of relative change		
137. Result reported by authors (with variance measure)		
138. Unit of analysis (e.g. by individuals or cluster/groups)		
139. Statistical methods used and appropriateness of these methods		
140. Reanalysis required? (specify)	... Yes/No/Unclear	
141. Reanalysis possible?	... Yes/No/Unclear	
142. Individual time-point results		
143. Read from figures?	... Yes/No/Unclear	
144. Reanalysed results	Change in level	SE
145. Notes:		

Applicability

146. Have important populations been excluded from the study? (consider disadvantaged populations and possible differences in the intervention effect)	... Yes/No/Unclear	
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1 2 3 4 5	147. Is the intervention likely to be aimed at disadvantaged groups? <i>(e.g. lower socioeconomic groups)</i>	... Yes/No/Unclear	
6 7 8 9	148. Does the study directly address the review question? <i>(any issues of partial or indirect applicability)</i>	... Yes/No/Unclear	
10	149. Notes:		

Other information

	Description as stated in report/paper	Location in text <i>(pg & ¶/fig/table)</i>
150. Key conclusions by study authors		
151. References to other relevant studies		
152. Correspondence required for further study information <i>(what and from whom)</i>		
153. Further study information requested <i>(from whom, what and when)</i>		
154. Correspondence received <i>(from whom, what and when)</i>		
155. Note:		

Risk of Bias assessment for RCTs

Domain	Risk of bias <i>Low/ High/Unclear</i>	Support for judgment	Location in text <i>(pg & ¶/fig/table)</i>
156. Random sequence generation <i>(selection bias)</i>			
157. Allocation concealment <i>(selection bias)</i>			
158. Blinding of participants and personnel <i>(performance bias)</i>		Outcome group: All/	
<i>(if required)</i>		Outcome group:	
159. Blinding of outcome assessment <i>(detection bias)</i>		Outcome group: All/	
<i>(if required)</i>		Outcome group:	
160. Incomplete outcome data <i>(attrition bias)</i>			
161. Selective outcome reporting? <i>(reporting bias)</i>			
162. Other bias			
163. Notes:			

Table 1: Results of the search strategy in the selected databases (Suppl. 2)

DATA BASE	DATE OF SEARCH	NUMBER DE REFERENCES...	
		...found...	...after removing duplicates
MEDLINE OVID SP	02.09.19	22'765	22'760
EMBASE.COM	02.09.19	24'828	11'186
PUBMED	02.09.19	692	98
CINAHL EBSCO	02.09.19	5'624	843
PSYCINFO OVID SP	02.09.19	1'380	296
CENTRAL – COCHRANE LIBRARY WILEY	02.09.19	413	174
WEB OF SCIENCE – CORE COLLECTION	02.09.19	5'623	1'119
<u>TOTAL</u>		<u>61'325</u>	<u>36'476</u>

BMJ Open

EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES OF INTEREST AMONG COMMUNITY-DWELLING OLDER ADULTS: a protocol for a systematic review

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2019-035481.R1
Article Type:	Protocol
Date Submitted by the Author:	28-Nov-2019
Complete List of Authors:	Latanioti, Maria; Service Universitaire de Psychiatrie de l'Age Avancé (SUPAA), Department of Psychiatry, Lausanne University Hospital Schuster, Jean-Pierre; Service Universitaire de Psychiatrie de l'Age Avancé (SUPAA), Department of Psychiatry, Lausanne University Hospital Rosselet Amoussou , Joelle; Education and Research Department, Lausanne University Hospital and University of Lausanne, Department of Psychiatry, Lausanne University Hospital Strippoli, Marie-Pierre; Psychiatric Epidemiology and Psychopathology Research Center, Lausanne University Hospital, Department of Psychiatry Von-Gunten, Armin; University of Lausanne Hospital Centre, Service of Old Age Psychiatry Ebbing, Karsten; Service Universitaire de Psychiatrie de l'Age Avancé (SUPAA), Department of Psychiatry, Lausanne University Hospital Verloo, Henk; School of Health sciences HES-SO Valais/Wallis, Nursing Sciences ; University Hospital of Lausanne, Service of Old Age Psychiatry
Primary Subject Heading:	Addiction
Secondary Subject Heading:	Public health, Addiction, Geriatric medicine, Health services research, Mental health
Keywords:	Old age psychiatry < PSYCHIATRY, EPIDEMIOLOGY, GERIATRIC MEDICINE, Substance misuse < PSYCHIATRY, PUBLIC HEALTH

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Research protocol for a systematic review

EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES OF INTEREST AMONG COMMUNITY-DWELLING OLDER ADULTS: a protocol for a systematic review

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Abstract

Introduction:

There is little epidemiological evidence and knowledge about at-risk alcohol use among community-dwelling older adults and their chronic and acute alcohol-related comorbidities of interest. This systematic review will summarise and examine relevant studies about the epidemiology of at-risk alcohol use and associated comorbidities of interest in this population.

Methods:

We will search the following databases, without language or date restrictions, from inception to 31 August 2019: Embase.com, Medline Ovid SP, Pubmed (NOT medline[sb]), CINAHL EBSCO, PsycINFO Ovid SP, Central - Cochrane Library Wiley and Web of Science (Core Collection). Search strategies will be developed in collaboration with a librarian. We will use predefined search terms for alcoholism, epidemiology, the elderly, living place and comorbidities of interest, as well as terms related to the identification of "measurements", "tools" or "instruments" for measuring harm from alcohol use. At-risk status will be determined by the amount of alcohol consumed and any comorbidities of interest associated with at-risk alcohol use, with the latter being documented separately or using an assessment tool for at-risk drinking. We will also examine the bibliographies of all the relevant articles found and search for unpublished studies. We will consider publications in all languages.

Ethics and dissemination:

No ethical approval is necessary. Results will be presented in national and international conferences on addiction and published in a peer-reviewed journal.

Keywords: Alcohol consumption, alcohol dependence, at-risk drinking, comorbidities, disorders, epidemiology, geriatric drinkers, community-dwelling, incidence, injury, occurrence, hypertension, depression, pain, liver disease, insomnia, cognitive deficiency, diabetes, anxiety, place of living, mortality, multimorbidity, older adults, very old adults, prevalence, polymorbidity.

Study Strengths and Limitations

- Will provide specific, synthesised knowledge about the epidemiology of at-risk alcohol use among older and very old community-dwelling older adults;
- Will include a selection of associated comorbidities of interest (cognitive impairment, diabetes, obesity, heart failure, depression, hypertension, insomnia, liver failure, pain and anxiety) related to at-risk drinking among old and very old community-dwelling older adults;
- Will report on the different definitions of at-risk drinking among old and very old community-dwelling adults in different studies and countries, including the quantification of their consumption;
- Will use inclusion criteria which impose no restrictions on language, study age or geographic location;
- Nevertheless, one potential limitation could be the introduction of bias due to the authors' personal judgements in their assessments of the studies included.

PROSPERO registration number: CRD42018099965

103 INTRODUCTION

104 Alcohol consumption and misuse is a major substance abuse problem among
105 community-dwelling older adults (1-3). Excessive alcohol use is a well-known health
106 risk among elderly people (4). It is widely documented that older adults' responses to
107 alcohol are different from those of younger adults due to the physiological process of
108 ageing (5, 6). The physiological changes occurring with ageing, as well as differences in
109 the activities and responsibilities of older people, are used for establishing the criteria of
110 alcoholism and ageing (7, 8). Older and very old adults are more vulnerable to the effects
111 of alcohol because of metabolic and other changes in their bodies and their high rate of
112 chronic diseases (1, 7).

113 Epidemiological studies have shown declining alcohol use with age (4, 9). However, the
114 number of older adults exhibiting at-risk drinking is likely to increase when the age
115 cohort born after 1950 (the "baby boomers"), with its heavier drinking habits, reaches
116 old age (10, 11). The sociodemographic and political changes affecting this generation,
117 especially in western countries, had a great impact on the way people used and abused
118 alcohol and psychotropic substances. Individual differences, like general health, physical
119 or psychiatric comorbidities, drinking-age onset and the presence of cognitive
120 impairment can alter responses to alcohol among older adults (6, 12). Adults reaching
121 very old age are more likely to suffer from cognitive decline, and the typical adverse
122 effects of heavy alcohol consumption may worsen (13, 14). Dementia resulting from
123 alcoholism is often diagnosed in older adults when their evident cognitive and functional
124 decline cannot be attributed to a progressive neurodegenerative disorders like
125 Alzheimer's disease, or when their clinical history reveals chronic and severe drinking.
126 Adults reaching very old age also undergo the systemic physiological and neural changes
127 that may make them more susceptible to the effects of alcohol (15, 16).

128 Additionally, due to the metabolic and neurological changes that occur with at-risk
129 drinking in old age, alcohol consumption is one of the lifestyle issues which should be
130 considered in cases involving diabetic, hypertensive and depressive older patients (17).
131 Many pharmacological treatments have potential interactions with alcohol (18).

132 Unfortunately, the criteria for alcohol abuse and dependence established by the DSM or
133 ICD manuals are not adapted for older and very old adults (19, 20). Bearing this in mind,
134 physicians often use the at-risk, moderate and heavy drinking model to characterise
135 drinking patterns more effectively (21, 22). Studies have recommended that at-risk
136 drinking should be considered on a case by case basis (23). Fundamentally, we know
137 that alcohol consumption in older age can compromise general health (5, 12).

138 Nonetheless, defining *at-risk drinking* has shown itself to be methodologically and
139 conceptually challenging (24, 25). Factors such as drinking volumes, drinking patterns,
140 types of drinks and drink size have been considered in efforts to define a threshold for
141 low-risk alcohol use(3, 26). Limits vary between countries and even between regions in
142 the same country (e.g. Spain) (26, 27). At-risk drinking can be defined as alcohol
143 consumption beyond the limits that can lead to all-cause mortality, chronic conditions
144 and acute consequences (6, 15, 28).

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3 145 The American *National Institute on Alcohol Abuse and Alcoholism's* definition of low-risk
4 146 alcohol consumption—the lowest threshold (29)—has established criteria for low-risk
5 147 drinking for adults over 65 years old. It recommends a pattern involving no more than
6 148 one alcoholic drink per day and sets a standard amount of drink: one can (12 US fl oz or
7 149 approx. 355 ml) of beer, one glass (5 US fl oz or approx. 148 ml) of wine, a small glass
8 150 (4 US fl oz or approx. 118 ml) of liquor or one shot (1.5 US fl oz or approx. 44 ml) of hard
9 151 liquor. Translated into equivalent measures of pure alcohol, as documented in the
10 152 literature, these equate to 0.6 fluid ounces in imperial measurements and ~17 grams in
11 153 metric measurements (26). Multiple features of at-risk drinking are documented in the
12 154 literature (25). However, the USA's low-risk drinking guidelines are generally in line
13 155 with the risk levels observed in the scientific literature (2, 30). Comorbidity is defined as
14 156 the presence of more than one distinct medical condition in an individual. This condition
15 157 can exist simultaneously with, but independently of, another condition, or it can be
16 158 related (31, 32). The comorbidities of interest to at-risk alcohol use among older adults
17 159 are hypertension, depression, pain, liver disease, insomnia, cognitive deficiency,
18 160 diabetes and anxiety. Our systematic review will explore at-risk alcohol use because we
19 161 found no reviews on this issue in the international literature, even though awareness of
20 162 at-risk alcohol use among the elderly is rising among the general population and
21 163 healthcare professionals. This systematic review will only examine at-risk alcohol (and
22 164 not other substances) consumption because it is the substance for which we have the
23 165 most information. The following research questions will guide this systematic review:
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- What is the reported epidemiology of alcohol consumption, age of onset and severity of use among home-dwelling older adults?
- What are the psychiatric and somatic comorbidities occurring in this population?
- Which tools and measurements are used to document the comorbidities associated with at-risk drinking?
- Do we have epidemiological data concerning alcohol use among very old adults?
- Is there an association between drinking volume and alcohol-related harm?

43 176 **METHODS**

44 177 This review will be conducted following the recommendations and harms-reporting
45 178 checklist of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for
46 179 Protocols (PRISMA-P) (33, 34), the reporting proposals of the Meta-analysis Of
47 180 Observational Studies in Epidemiology (MOOSE) (35) and the methods outlined in the
48 181 Cochrane Handbook for Systematic Reviews of Interventions (36) (Suppl. 1).

49 182 Database searches and searches using other techniques will be completed in September
50 183 2019. Retrieved articles will then be screened. The entire study is expected to be
51 184 completed by September 2020.

52 185 ***Inclusion criteria***

53 186 *Types of studies*

54 187 This review will include retrospective and prospective epidemiological studies, cohort
55 188 studies, case-control studies, controlled before-and-after studies, interrupted-time-

189 series studies and controlled trials with inappropriate randomisation (quasi-
190 experimental studies) (37, 38). We will put no language restrictions on our search for
191 papers.

192 *Types of participants*

193 This review will consider studies involving home-dwelling adults with a minimum mean
194 age of 60 years old, as well as studies with participants aged 55 years old or more who
195 consume at least one alcoholic drink per day. Although various definitions of old-age
196 exist, we will refer to the UN cut-off considering anybody aged 60 or more to be an older
197 person (39).

198 *Types of outcome measures*

199 To highlight the epidemiology of at-risk alcohol consumption and the presence of
200 comorbidities of interest in home-dwelling older and very old adults, this systematic
201 review protocol will use the drinking limit established by America's *National Institute on*
202 *Alcohol Abuse and Alcoholism* (40, 41). Considering at-risk drinking as a medical
203 condition, we have chosen to search for epidemiological data concerning medical
204 conditions simultaneously present among older adults with at-risk drinking behaviours
205 (30, 42). We have chosen not to limit our search to medical conditions cited in the
206 Comorbidity Alcohol Risk Evaluation Tool (CARET) (43). The following conditions are
207 not captured by this tool: osteoporosis, behavioural disorders, other drug use, social
208 isolation, ORL cancers, and falls and trauma.

209 In addition, we will cross-reference at-risk alcohol consumption tools involving medical
210 conditions with those referenced in the CoLaus/PsycoLaus study of the general
211 population of Lausanne, Switzerland (44-46). This choice was made purposefully as, in
212 the future, we plan to analyse Swiss data to compare them with data found in the
213 international literature.

- 214 • The review's primary outcome measures will be the:
 - 215 ○ Epidemiology of at-risk alcohol consumption, age of onset and severity of
 - 216 alcohol use (amount, frequency and types of drinks).
- 217 • The review's secondary outcome measures will be the:
 - 218 ○ Psychiatric and somatic comorbidities frequently occurring among home-
 - 219 dwelling older adults with at-risk alcohol consumption;
 - 220 ○ Documentation of the tools and measurements of comorbidities
 - 221 associated with at-risk drinking;
 - 222 ○ Presence of epidemiological data on very old adults' drinking habits;
 - 223 ○ Associations between drinking volume and alcohol-related harm.

224 ***Search methods for the identification of relevant studies***

225 *Electronic searches*

226 We will search the following databases, with no language or date restrictions:
227 Embase.com, Medline Ovid SP, Pubmed (NOT medline[sb]), CINAHL EBSCO, PsycINFO
228 Ovid SP, Central - Cochrane Library Wiley and Web of Science (Core Collection).

229 *Hand and grey literature searches*

230 We will search the reference lists of the relevant articles identified for unpublished
231 studies (grey literature) and for experts in the field who could be contacted.

232 The search strategies will be adapted to each database's syntax and subject headings.

233 Descriptor terms will include:

- 234 • Terms for alcoholism: "at-risk alcohol use", "heavy drinking", "binge drinking",
235 "alcohol dependence", "alcohol abuse", "Wernicke syndrome", "Korsakoff
236 dementia", "at-risk drinking", "alcohol consumption", "alcohol dependence" and
237 "geriatric drink*";
- 238 • Epidemiological terms: "epidemiology", "occurrence", "prevalence", "incidence"
239 and "occasionally";
- 240 • Terms for elderly: "home-dwelling older adults", "elderly", "aged", "home-care
241 patients", "older adults" and "very old adults";
- 242 • Terms for living place: "home-dwelling", "living in place", "homebound", "primary
243 care", "community health services", "community hospital", "ambulatory care",
244 "outpatient clinics", "hospital", "ambulatory care facilities", "day-care", "primary
245 healthcare", "community health centres", "health services for the aged",
246 "community", "domiciliary", "home or home-care or home-based", "outpatient",
247 "day patient", "community care", "home-care services", "general practice" and
248 "urban population";
- 249 • Terms related to the comorbidities of interest: "cognitive impairment",
250 "diabetes", "obesity", "heart failure", "depression", "hypertension", "insomnia",
251 "liver failure", "pain", "dementia", "cognitive deficiency" and "anxiety";
- 252 • Terms related to the identification of "measurements", "tools" and "instruments"
253 for measuring the harm of alcohol use.

254 Suppl. 2 presents the search strategy and equations.

255

256 **DATA COLLECTION AND ANALYSIS**

257 *Study selection*

258 Three reviewers—ML, KE and JPS—will independently screen the titles and abstracts
259 identified in the searches to assess which studies meet the inclusion criteria.

260 Disagreements will be resolved through discussion or, if needed, a consensus will be
261 reached after discussion with the co-authors (HV, AvG).

262 The reviewers will then independently assess the full-text articles to ensure that they
263 meet the inclusion criteria. Disagreements will be discussed and resolved with the co-
264 authors (HV, AvG). A flowchart of the trial selection process has been drawn in
265 accordance with the PRISMA statement (47) (Suppl. 3).

266 *Data Extraction*

267 Three authors—ML, KE and HV—will extract the data independently using a specially
268 designed, standardised data extraction form (Suppl. 4). Discrepancies will be resolved
269 through discussion and consultation with the co-author (AvG).

270 The following information will be extracted from each study included: (1) study authors,
271 year of publication and country where the study was conducted; (2) study
272 characteristics (including setting and design, duration of follow-up and sample size); (3)
273 participants' characteristics (including age, sex, social status, marital status, educational
274 status, activity, age of onset of alcohol consumption, level of autonomy, history of

275 violence); (4) comorbidities of interest (hypertension, depression, pain, liver disease,
276 insomnia, cognitive deficiency, diabetes, anxiety); and (5) types of outcome measures.

277 *Assessment of the Risks of Bias in Included Studies*

278 Three reviewers—ML, KE and JPS—will independently assess the risks of bias in all the
279 retrospective and prospective epidemiological studies, cohort studies, case-control
280 studies, controlled before-and-after studies, interrupted-time-series studies and
281 controlled trials with inappropriate randomisation (quasi-experimental studies)
282 included. Disagreements will be resolved through discussion and consultation with the
283 co-authors (HV, AvG).

284 We will use the validated Robins-I tool for assessing the risk of bias in non-randomised
285 studies of interventions (NRSI) (48). This tool covers two dimensions and seven
286 domains through which bias might be introduced into an NRSI: i) pre- and at
287 intervention (bias due to confounding, bias in the selection of study participants and
288 bias in the classification of the intervention), and ii) post-intervention (bias due to
289 deviations from intended interventions, bias due to missing data, bias in the
290 measurement of outcomes and bias in the selection of the reported result) (48). Any
291 disagreements in quality assessments will be resolved through discussion.

292 Our search strategy will be very careful to select original research papers only and will
293 try to avoid duplicates of published data of longitudinal studies. Additionally, our
294 extraction sheet will pay special attention to longitudinal cohort studies and secondary
295 analyses of published results.

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297 **Statistical analyses**

298 Statistical analyses will be conducted following the recommendations of the Cochrane
299 Handbook for Systematic Reviews of Interventions (49) and the PRISMA and MOOSE
300 statements (50).

301 For dichotomous outcomes, average intervention effects will be calculated as relative
302 risks with 95% confidence intervals (CIs), using a random effects model (51). For
303 continuous data, a random effects model will be used to calculate weighted mean
304 differences with 95% CIs. If required, we will calculate standard deviations from the
305 standard errors or 95% CIs presented in the articles. Heterogeneity will be quantified
306 using the I^2 and chi-squared tests. Funnel plots will be drawn, and Egger tests will be
307 computed to explore the possibility of publication bias (52). Reasons for heterogeneity
308 in effect estimates will be sought in meta-analyses (53). To explore the possible
309 determinants of heterogeneity, we will conduct subgroup analyses according to selected
310 study characteristics (e.g. participants' ages, country where the study was conducted,
311 amounts of alcohol). Furthermore, sensitivity analyses will be conducted by: (1)
312 excluding relatively small studies (with fewer than 20 participants per randomisation
313 group); and (2) restricting the analyses to studies of good quality. Data will be analysed
314 using SPSS software (version 25.0) and Review Manager 5.3.

315 **Patient and Public Involvement**

316 No patients or members of the public were involved in the preparation of this protocol
317 for a systematic review.

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3 3184 319 **Discussion**

5 320 At-risk alcohol use among older adults is a common health problem. It is under-
6 321 diagnosed by primary care physicians, partially due to the lack of up-to-date
7 322 epidemiological data (21) and partially due to the lack of relevant and specific diagnostic
8 323 tools and instruments (24, 54). We will propose recommendations about screening tools
9 324 and instruments which might be particularly appropriate for clinicians to use when
10 325 screening for alcohol misuse in certain contexts.

11 326 Before being able to highlight the lack of data on alcohol consumption among older and
12 327 very old adults or trying to establish relevant diagnostic criteria and assessment
13 328 methods, it is important to find out about the existing epidemiological data at an
14 329 international level. It is equally important to acknowledge the difficulty in defining at-
15 330 risk drinking at an international level and the methods used to extract this data (2).

16 331 Demonstrating a high prevalence, frequency or incidence of at-risk alcohol use among
17 332 older home-dwelling adults could encourage physicians to use existing screening tests.
18 333 This could be an important measure, considering that alcohol-related health problems
19 334 reduce the length and quality of life (55). Recent studies, however, have demonstrated
20 335 that elevated alcohol consumption cannot be evaluated solely in terms of frequency
21 336 (56); it is also necessary to know the types of drinks ingested (57).

22 337 **Ethics and Dissemination**

23 338 No ethical clearance is necessary. We expect to complete the study in September 2020.
24 339 Results will be presented at national and international conferences on addiction and
25 340 published in an international peer-reviewed journal.

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References

1. Aira M, Hartikainen S, Sulkava R. Community prevalence of alcohol use and concomitant use of medication--a source of possible risk in the elderly aged 75 and older? *International journal of geriatric psychiatry*. 2005;20(7):680-5.
2. Dawson DA. Defining Risk Drinking. *Alcohol Research & Health*. 2011;34(2):144-56.
3. Substance Abuse Tcf. Substance Abuse Among Older Adults. Treatment Improvement Protocol (TIP) Series, No. 26. Rockville (MD) - US: Substance Abuse and Mental Health Services Administration; 1998.
4. Blazer DG, Wu LT. The epidemiology of at-risk and binge drinking among middle-aged and elderly community adults: National Survey on Drug Use and Health. *The American journal of psychiatry*. 2009;166(10):1162-9.
5. Graham K, Schmidt G. The effects of drinking on health of older adults. *The American journal of drug and alcohol abuse*. 1998;24(3):465-81.
6. Blow FC, Walton MA, Barry KL, Coyne JC, Mudd SA, Copeland LA. The relationship between alcohol problems and health functioning of older adults in primary care settings. *Journal of the American Geriatrics Society*. 2000;48(7):769-74.
7. Cawthon PM, Fink HA, Barrett-Connor E, Cauley JA, Dam TT, Lewis CE, et al. Alcohol use, physical performance, and functional limitations in older men. *Journal of the American Geriatrics Society*. 2007;55(2):212-20.
8. Blanco C, Grant J, Petry NM, Simpson HB, Alegria A, Liu SM, et al. Prevalence and correlates of shoplifting in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). *The American journal of psychiatry*. 2008;165(7):905-13.
9. Van Montfoort-De Rave KFG, De Weert-Van Oene GH, Beurmanjer H, Koekkoek B. Late-onset alcohol dependence: patient-reported problems. *Addiction Research & Theory*. 2017;25(2):139-45.
10. Adams WL, Cox NS. Epidemiology of problem drinking among elderly people. *The International journal of the addictions*. 1995;30(13-14):1693-716.
11. Pierucci-Lagha A. [Alcoholism and aging. 1. Epidemiology, clinical aspects and treatment]. *Psychologie & neuropsychiatrie du vieillissement*. 2003;1(3):197-205.
12. Hu Y, Pikhart H, Malyutina S, Pajak A, Kubinova R, Nikitin Y, et al. Alcohol consumption and physical functioning among middle-aged and older adults in Central and Eastern Europe: results from the HAPIEE study. *Age and ageing*. 2015;44(1):84-9.
13. Tyas SL. Alcohol use and the risk of developing Alzheimer's disease. *Alcohol research & health : the journal of the National Institute on Alcohol Abuse and Alcoholism*. 2001;25(4):299-306.
14. Volkert J, Schulz H, Harter M, Wlodarczyk O, Andreas S. The prevalence of mental disorders in older people in Western countries - a meta-analysis. *Ageing research reviews*. 2013;12(1):339-53.
15. Woods AJ, Porges EC, Bryant VE, Seider T, Gongvatana A, Kahler CW, et al. Current Heavy Alcohol Consumption is Associated with Greater Cognitive Impairment in Older Adults. *Alcoholism, clinical and experimental research*. 2016;40(11):2435-44.
16. Ormstad H, Rosness TA, Bergem AL, Bjertness E, Strand BH. Alcohol consumption in the elderly and risk of dementia related death--a Norwegian prospective study with a 17-year follow-up. *The International journal of neuroscience*. 2016;126(2):135-44.
17. Immonen S, Valvanne J, Pitkala KH. The prevalence of potential alcohol-drug interactions in older adults. *Scandinavian journal of primary health care*. 2013;31(2):73-8.
18. Onder G, Landi F, Della Vedova C, Atkinson H, Pedone C, Cesari M, et al. Moderate alcohol consumption and adverse drug reactions among older adults. *Pharmacoepidemiology and Drug Safety*. 2002;11(5):385-92.
19. Harford TC, Grant BF, Yi HY, Chen CM. Patterns of DSM-IV alcohol abuse and dependence criteria among adolescents and adults: results from the 2001 National Household Survey on Drug Abuse. *Alcoholism, clinical and experimental research*. 2005;29(5):810-28.

- 1
2
3 391 20. Boscarino JA, Moorman AC, Rupp LB, Zhou Y, Lu M, Teshale EH, et al. Comparison of ICD-9
4 392 Codes for Depression and Alcohol Misuse to Survey Instruments Suggests These Codes Should Be Used
5 393 with Caution. *Digestive diseases and sciences*. 2017;62(10):2704-12.
- 6 394 21. Hajat S, Haines A, Bulpitt C, Fletcher A. Patterns and determinants of alcohol consumption in
7 395 people aged 75 years and older: results from the MRC trial of assessment and management of older
8 396 people in the community. *Age and ageing*. 2004;33(2):170-7.
- 9 397 22. Ortola R, Garcia-Esquinas E, Leon-Munoz LM, Guallar-Castillon P, Valencia-Martin JL, Galan I,
10 398 et al. Patterns of Alcohol Consumption and Risk of Frailty in Community-dwelling Older Adults. *The*
11 399 *journals of gerontology Series A, Biological sciences and medical sciences*. 2016;71(2):251-8.
- 12 400 23. Hirata ES, Almeida OP, Funari RR, Klein EL. Alcoholism in a geriatric outpatient clinic of Sao
13 401 Paulo-Brazil. *International psychogeriatrics*. 1997;9(1):95-103.
- 14 402 24. Conigliaro J, Kraemer K, McNeil M. Screening and identification of older adults with alcohol
15 403 problems in primary care. *Journal of geriatric psychiatry and neurology*. 2000;13(3):106-14.
- 16 404 25. Di Bari M, Silvestrini G, Chiarlone M, De Alfieri W, Patussi V, Timpanelli M, et al. Features of
17 405 excessive alcohol drinking in older adults distinctively captured by behavioral and biological screening
18 406 instruments: An epidemiological study. *Journal of clinical epidemiology*. 2002;55(1):41-7.
- 19 407 26. Munoz M, Ausin B, Santos-Olmo AB, Harter M, Volkert J, Schulz H, et al. Alcohol use, abuse and
20 408 dependence in an older European population: Results from the MentDis_ICF65+ study. *PloS one*.
21 409 2018;13(4):e0196574.
- 22 410 27. Bosque-Prous M, Brugal MT, Lima KC, Villalbi JR, Bartroli M, Espelt A. Hazardous drinking in
23 411 people aged 50 years or older: a cross-sectional picture of Europe, 2011-2013. *International journal of*
24 412 *geriatric psychiatry*. 2017;32(8):817-28.
- 25 413 28. Nelson DE, Sattin RW, Langlois JA, DeVito CA, Stevens JA. Alcohol as a risk factor for fall injury
26 414 events among elderly persons living in the community. *Journal of the American Geriatrics Society*.
27 415 1992;40(7):658-61.
- 28 416 29. Administration NHTS. National Institute on Alcohol Abuse and Alcoholism.(2000). *Sentencing*
29 417 *and Disposition of Youth DUI and Other Alcohol Offenses: A Guide for Judges and Prosecutors*,
30 418 Washington, DC. 2006.
- 31 419 30. Grant BF, Chou SP, Saha TD, Pickering RP, Kerridge BT, Ruan WJ, et al. Prevalence of 12-Month
32 420 Alcohol Use, High-Risk Drinking, and DSM-IV Alcohol Use Disorder in the United States, 2001-2002 to
33 421 2012-2013: Results From the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA*
34 422 *psychiatry*. 2017;74(9):911-23.
- 35 423 31. Valderas JM, Starfield B, Sibbald B, Salisbury C, Roland M. Defining comorbidity: implications
36 424 for understanding health and health services. *Ann Fam Med*. 2009;7(4):357-63.
- 37 425 32. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and
38 426 age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication.
39 427 *Archives of general psychiatry*. 2005;62(6):593-602.
- 40 428 33. Moher D, Liberati A, Tetzlaff J, Altman DG, Group P. Preferred reporting items for systematic
41 429 reviews and meta-analyses: the PRISMA statement. *PLoS medicine*. 2009;6(7):e1000097.
- 42 430 34. Zorzela L, Loke YK, Ioannidis JP, Golder S, Santaguida P, Altman DG, et al. PRISMA harms
43 431 checklist: improving harms reporting in systematic reviews. *BMJ (Clinical research ed)*. 2016;352:i157.
- 44 432 35. DF S, Berlin JA, Morton SC, Olkin I, Williamson GD, Rennie D. Meta-analysis of observational
45 433 studies in epidemiology: a proposal for reporting. *Meta-analysis Of Observational Studies in*
46 434 *Epidemiology (MOOSE) group*. *Jama*. 2008.
- 47 435 36. J. H, S. G. *The Cochrane handbook for systematic reviews of interventions*. Cb s e, editor.
48 436 Chichester, UK: John Wiley & Sons, Ltd; 2008.
- 49 437 37. P. S. What is a non-randomised controlled trial? *British Medical Journal*. 2014;348.
- 50 438 38. Ferriter M, N. H. Does the non-randomized controlled study have a place in the systematic
51 439 review? A pilot study. *Criminal behaviour and mental health*. 2005;15(2):111-20.
- 52 440 39. Elderly population [Internet]. WHO. 2019. Available from:
53 441 http://www.searo.who.int/entity/health_situation_trends/data/chi/elderly-population/en/.
- 54
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3 442 40. Hasin DS, Stinson FS, Ogburn E, Grant BF. Prevalence, correlates, disability, and comorbidity of
4 443 dsm-iv alcohol abuse and dependence in the united states: Results from the national epidemiologic
5 444 survey on alcohol and related conditions. Archives of general psychiatry. 2007;64(7):830-42.
6 445 41. Gunzerath L, Faden V, Zakhari S, Warren K. National Institute on Alcohol Abuse and Alcoholism
7 446 Report on Moderate Drinking. Alcoholism: Clinical and Experimental Research. 2004;28(6):829-47.
8 447 42. Hasin DS, Stinson FS, Ogburn E, Grant BF. Prevalence, correlates, disability, and comorbidity of
9 448 DSM-IV alcohol abuse and dependence in the United States: results from the National Epidemiologic
10 449 Survey on Alcohol and Related Conditions. Archives of general psychiatry. 2007;64(7):830-42.
11 450 43. Barnes AJ, Moore AA, Xu H, Ang A, Tallen L, Mirkin M, et al. Prevalence and correlates of at-
12 451 risk drinking among older adults: the project SHARE study. Journal of general internal medicine.
13 452 2010;25(8):840-6.
14 453 44. Novy J, Castelao E, Preisig M, Vidal PM, Waeber G, Vollenweider P, et al. Psychiatric co-
15 454 morbidity and cardiovascular risk factors in people with lifetime history of epilepsy of an urban
16 455 community. Clin Neurol Neurosurg. 2012;114(1):26-30.
17 456 45. Preisig M, Waeber G, Vollenweider P, Bovet P, Rothen S, Vandeleur C, et al. The PsyCoLaus
18 457 study: methodology and characteristics of the sample of a population-based survey on psychiatric
19 458 disorders and their association with genetic and cardiovascular risk factors. BMC Psychiatry.
20 459 2009;9(1):9.
21 460 46. Firmann M, Mayor V, Vidal PM, Bochud M, Pecoud A, Hayoz D, et al. The CoLaus study: a
22 461 population-based study to investigate the epidemiology and genetic determinants of cardiovascular
23 462 risk factors and metabolic syndrome. BMC Cardiovasc Disord. 2008;8:6.
24 463 47. Moher D, Liberati A, Tetzlaff J, Altman D, Group ftP. Preferred reporting items for systematic
25 464 reviews and meta-analyses: the PRISMA statement. BMJ. 2009;339:b2535.
26 465 48. Sterne JA, Hernán MA, Reeves BC, Savović J, Berkman ND, Viswanathan M, et al. ROBINS-I: a
27 466 tool for assessing risk of bias in non-randomised studies of interventions. BMJ. 2016;355.
28 467 49. Higgins J, Green S. The Cochrane handbook for systematic reviews of interventions. Cb s,
29 468 editor. Chichester, UK: John Wiley & Sons, Ltd; 2008.
30 469 50. Moher D, Liberati A, Tetzlaff J, Altman DG, The PG. Preferred Reporting Items for Systematic
31 470 Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med. 2009;6(7):e1000097.
32 471 51. Riley RD, Higgins JP, Deeks JJ. Interpretation of random effects meta-analyses. BMJ (Clinical
33 472 research ed). 2011;342:d549.
34 473 52. Lau J, Ioannidis J, Terrin N, Schmid C, I. O. The case of the misleading funnel plot. BMJ (Clinical
35 474 research ed). 2006;333:597-600.
36 475 53. Borenstein M, Hedges LV, Higgins JPT, Rothstein HR. Prediction intervals: Introduction to Meta-
37 476 Analysis. In: Ltd JWS, editor. Chichester, UK2009. p. 127-33.
38 477 54. Jones TV, Lindsey BA, Yount P, Soltys R, Farani-Enayat B. Alcoholism screening questionnaires:
39 478 are they valid in elderly medical outpatients? Journal of general internal medicine. 1993;8(12):674-8.
40 479 55. Suwala M, Gerstenkorn A. [Detection of alcohol problems among elderly people]. Psychiatria
41 480 polska. 2007;41(5):703-13.
42 481 56. Krokstad S, Langhammer A, Hveem K, Holmen T, Midthjell K, Stene T, et al. Cohort Profile: The
43 482 HUNT Study, Norway. International journal of epidemiology. 2012;42(4):968-77.
44 483 57. Zeng Y. Towards Deeper Research and Better Policy for Healthy Aging --Using the Unique Data
45 484 of Chinese Longitudinal Healthy Longevity Survey. China Economic J. 2012;5(2-3):131-49.

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486 ***Authors' contributions***

487 ML is the guarantor, and all the authors contributed to drafting the protocol. All authors
488 will contribute to the development of the selection criteria, data extraction and analysis,
489 and the search strategy done by JRA and MPS. JPS, HV, KE, and AvG provided expertise on
490 evidence-based practice. All the authors approved the final protocol manuscript.

491 ***Funding***

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492 This research received a grant from the public University “School of Health Sciences, HES-
493 SO Valais/Wallis, CH-1950 Sion, Switzerland”.

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495 ***Conflicts of Interest***

496 All authors declare no conflicts of interest.

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For peer review only

**EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES OF INTEREST AMONG COMMUNITY-DWELLING
OLDER ADULTS: a protocol for a systematic review***

Section and topic	Item No	Checklist item	Page no.
ADMINISTRATIVE INFORMATION			
PPTitle:			
Identification	1a	Identify the report as a protocol of a systematic review	Page 1
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	Page 1
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	
Authors:			
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	Page 1-2
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	Page 13
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	Suppl.5
Support:			
Sources	5a	Indicate sources of financial or other support for the review	Page 13
Sponsor	5b	Provide name for the review funder and/or sponsor	NA
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	Page 13
INTRODUCTION			
Rationale	6	Describe the rationale for the review in the context of what is already known	Page 3-4
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	Page 4
METHODS			
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	Page 5-6
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	Page 6-7 + Suppl.3
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	Suppl. 3
Study records:			

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3	Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	Page 6-7
4	Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	Page 7
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6	Data collection	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	Page 7
7	process			
8	Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	Page 7
9				
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11	Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	Page 6
12				
13	Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	Page 7-8
14				
15	Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	Page 8
16		15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2 , Kendall's τ)	Page 8
17		15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	Page 8
18		15d	If quantitative synthesis is not appropriate, describe the type of summary planned	Page 8
19				
20	Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	NA
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23	Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	Page 8
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26 Source: Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart L, PRISMA-P Group. Preferred reporting items for systematic review and
 27 meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. *BMJ*. 2015 Jan 2;349(jan02 1):g7647.
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Epidemiology of at risk alcohol use and associated comorbidities of interest among home dwelling older and very old adults: a systematic review

Document de travail_V8_02.09.2019

<p>Recherche effectuée par Joëlle ROSSELET AMOUSSOU, Psychiatry library, Education and Research Department, Lausanne University Hospital and University of Lausanne, Site de Cery, 1008 Prilly, Lausanne, Switzerland.</p>	<p>à l'attention de Maria LATANIOTI, Equipe mobile de la personne âgée, Département de psychiatrie du CHUV.</p>	
<p>Recherche révisée par Cécile Jaques et Jolanda Elmers, Medical Library, Education and Research Department, Lausanne University Hospital and University of Lausanne, Switzerland.</p>	<p>le 30 août 2019</p>	
<p>Finalité(s) de la recherche</p>	<p>Revue systématique</p>	

Question de recherche 2

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Question de recherche

Question originale (formulaire demande)	Epidemiology of at risk alcohol use and associated comorbidities of interest among home dwelling older and very old adults
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1. Articles d'intérêt (Protocole_version_05.07.2019)

PubMed	16021662[uid] OR 9741947[uid] OR 10894315[uid] OR 17302657[uid] OR 8751316[uid] OR 14500441[uid] OR 7025691[uid] OR 11910708[uid] OR 19131359[uid] OR 12271880[uid] OR 15897727[uid] OR 28879547[uid] OR 11001132[uid] OR 14960434[uid] OR 26297937[uid] OR 9195283[uid] OR 8832344[uid] OR 10404931[uid] OR 27658235[uid] OR 17606817[uid] OR 15201626[uid] OR 12366628[uid] OR 8120683[uid]
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2. Recherche préliminaire de revues systématiques

Embase.com

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

('aged'/de OR 'very elderly'/exp OR (elder* OR eldest OR geriatri* OR "old age*" OR "oldest old*" OR senior* OR senium OR "very old*" OR septuagenarian* OR octagenarian* OR octogenarian* OR nonagenarian* OR centarian* OR centenarian* OR supercentenarian* OR ((old OR older) NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR (aged NEXT/1 (patient OR people OR person OR subject))):ab,ti) AND ('alcoholism'/exp OR 'drinking behavior'/exp OR 'alcohol consumption'/exp OR 'alcohol abuse'/exp OR 'alcohol intoxication'/exp OR (alcohol* OR drink* OR drunk* OR ethanol):ab,ti) AND ('community care'/exp OR 'ambulatory care'/exp OR 'outpatient'/exp OR 'outpatient department'/exp OR 'day care'/exp OR 'primary health care'/exp OR 'health center'/exp OR 'home care'/exp OR (home OR homecare OR home-care OR home-based OR homebound OR home-bound OR "living alone" OR domiciliary OR "day patient*" OR community OR "preventive health" OR "preventive service" OR ambulatory OR outpatient* OR "out patient*" OR out-patient* OR (day NEXT/1 (clinic OR hospital)) OR daycare OR (day NEXT/1 (care OR center)) OR (primary NEXT/3 (care OR healthcare)) OR "first line care" OR "health center*" OR domestic):ab,ti) AND ([cochrane review]/lim OR [systematic review]/lim OR [meta analysis]/lim)

93	références trouvées le	2 septembre 2019
Commentaire(s) :	Filtre EBM : ([cochrane review]/lim OR [systematic review]/lim OR [meta analysis]/lim)	

Epistomonikos

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(alcohol* OR drink*) AND (elder* OR geriatri* OR aged OR old OR ageing)

9	références trouvées le	2 septembre 2019
Commentaire(s) :	Filtre Publication type : Systematic Review	

Cochrane Library Wiley

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(alcohol* OR drink*) AND (elder* OR geriatri* OR aged OR old OR ageing)

(alcohol* OR drink* OR drunk* OR ethanol) AND (incidence OR prevalence OR epidemiolog* OR morbidit*)

1	références trouvées le	2 septembre 2019
Commentaire(s) :		

Prospero

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

((alcohol* OR dirnk*) AND (elder* OR geriatri* OR aged OR old OR ageing)):TI AND (Epidemiologic OR Systematic Review OR Meta-Analysis OR PMA OR Review of Reviews):RT

5	références trouvées le	2 septembre 2019
Commentaire(s) :	Filtre (Epidemiologic OR Systematic Review OR Meta-Analysis OR PMA OR Review of Reviews):RT	

3. Sources de données exploitées

Embase.com

Medline Ovid SP

PubMed

CINAHL EBSCO

PsycINFO Ovid SP

CENTRAL - Cochrane Library Wiley

Web of Science – Core collection

4. Vocabulaire

Concepts choisis	Aged	Alcohol	Comorbidity	Epidemiology + Study designs reporting prevalence and incidence data
Mots libres Syntaxe Embase	elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing	(alcohol* OR drunk*):ab,ti,kw OR (drink*):ab,ti,kw NOT ('dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de OR (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*)):ab,ti,kw))	(comorbid* OR co- morbid* OR co-occurr* OR coocurr* OR ((disease* OR sickness*) NEAR/2 associat*)):ab,ti,kw OR (hypertension OR "blood pressure*" OR hypertensive):ab,ti,kw OR ("mood disorder*" OR OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) NEXT/3 disorder*)):ab,ti,kw OR (pain OR pains OR "physical suffering*" OR ache OR aches):ab,ti,kw OR (liver OR hepatic OR hepatit* OR hepatis OR hepatopathy OR cirrhosis):ab,ti,kw OR ((sleep NEAR/3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*):ab,ti,kw OR (((cognition OR neurocognitive OR consciousness) NEXT/3 disorder*) OR (cognitive NEXT/3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic	epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort OR "case-control stud*" OR ("cross sectional" NEXT/3 (study OR studies OR design OR research)) OR "follow-up stud*" OR OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective NEXT/3 (study OR studies OR design)) OR survey OR surveys OR screening

			<p>psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*):ab,ti,kw OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*"):ab,ti,kw OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*"):ab,ti,kw</p>	
Emtree	'aged'/de OR 'frail elderly'/de OR 'very elderly'/exp OR 'elderly care'/de OR 'geriatric care'/exp OR 'geriatric patient'/de OR 'geriatrics'/exp	'alcoholism'/exp OR 'drinking behavior'/exp OR 'alcohol consumption'/exp OR 'alcohol abuse'/exp NOT 'dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de	'comorbidity'/de OR 'comorbidity assessment'/exp OR 'disease association'/de OR 'hypertension'/exp OR 'mood disorder'/exp OR 'pain'/exp OR 'liver disease'/exp OR 'sleep disorder'/exp OR 'insomnia'/exp OR 'cognitive defect'/exp OR 'diabetes mellitus'/exp OR 'anxiety disorder'/exp	'epidemiology'/de OR 'epidemiology'/lnk OR 'health survey'/exp OR 'incidence'/de OR 'prevalence'/de OR 'morbidity'/de OR 'population'/exp OR 'population research'/de OR 'population risk'/de OR 'population statistics'/exp OR 'screening'/de OR 'mass screening'/de OR 'cohort analysis'/de OR 'case control study'/de OR 'population based case control study'/de OR 'cross-sectional study'/de OR 'follow up'/de OR 'longitudinal study'/de OR 'retrospective study'/de
MeSH	exp Aged/ OR "Geriatric Nursing"/ OR "Geriatric Assessment"/ OR "Geriatrics"/ OR "Geriatric Psychiatry"	alcoholism/ OR drinking behavior/ OR binge drinking/ OR alcohol drinking/ NOT exp "Deglutition Disorders"/ OR "Drinking"/ OR "Drinking Water"	"Comorbidity"/ OR exp "Hypertension"/ OR exp "Mood Disorders"/ OR exp "Pain"/ OR exp "Liver Diseases"/ OR exp "Sleep Wake Disorders"/ OR exp "Cognition Disorders"/ OR "Cognitive Dysfunction"/ OR exp "Dementia"/ OR exp "Diabetes Mellitus"/ OR exp "Anxiety Disorders"/	"Epidemiology"/ OR exp "Epidemiologic Methods"/ OR "epidemiology".fs. OR "Incidence"/ OR "Prevalence"/ OR "Morbidity"/ OR "Health Surveys"/ OR exp "Population Surveillance"/ OR "Epidemiologic Measurements"/ OR exp "Population"/ OR exp "Epidemiologic Methods"/ OR "Mass

				Screening"/ OR exp "Epidemiologic Studies"/
CINAHL	MH "Aged" OR MH "Aged, 80 and Over" OR MH "Frail Elderly" OR MH "Gerontologic Nursing+" OR MH "Geriatric Assessment+" OR MH "Geriatrics" OR MH "Geriatric Psychiatry"	MH "Alcoholism" OR MH "Alcohol Abuse+" OR MH "Drinking Behavior+" OR MH "Alcohol Drinking" OR MH "Binge Drinking" NOT MH "Deglutition Disorders" OR MH "Water Supply" OR MH "Fluid Intake"	MH "Comorbidity" OR MH "Hypertension+" OR MH "Affective Disorders+" OR MH "Pain+" OR MH "Liver Diseases+" OR MH "Sleep Disorders+" OR MH "Cognition Disorders+" OR MH "Dementia+" OR MH "Diabetes Mellitus+" OR MH "Anxiety Disorders+"	MH "Epidemiology+" OR MW epidemiology OR MH "Incidence" OR MH "Prevalence" OR MH "Morbidity" OR MH "Epidemiological Research" OR MH "Population" OR MH "Rural Population" OR MH "Suburban Population" OR MH "Urban Population" OR MH "Health Screening" OR MH "Prospective Studies+" OR MH "Case Control Studies" OR MH "Population-Based Case Control" OR MH "Cross Sectional Studies"
PsycINFO	geriatrics/ OR geriatric assessment/ OR geriatric patients/ OR geriatric psychiatry/ OR elder care/ OR aging in place/	exp alcohol abuse/ OR drinking behavior/ OR alcohol drinking patterns/ NOT dysphagia/ OR exp fluid intake/	comorbidity/ OR exp hypertension/ OR exp affective disorders/ OR exp pain/ OR pain measurement/ OR exp liver disorders/ OR exp sleep disorders/ OR cognitive impairment/ OR exp dementia/ OR exp diabetes mellitus/ OR exp anxiety disorders/	epidemiology/ OR exp population/ OR screening/ OR health screening/ OR cohort analysis/ OR followup studies/ OR exp longitudinal studies/ OR retrospective studies/

Concept Alcohol

Pour enlever du bruit avec "drink*" en terme libre, nous avons exclu les références associées à "dysphagia", "drinking water", etc.

Exemple avec la syntaxe de la base de données Embase.com :

drink*:ab,ti,kw NOT ('dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de OR (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*))) :ab,ti,kw

Concept Epidemiology

Pour construire notre concept nous avons combiné les termes libres et les vedettes matières associées à l'épidémiologie, avec les types d'études pouvant nous apporter des données épidémiologiques.

Les articles de (Waffenschmidt, 2017) et (Workneh, 2017) nous ont inspiré pour l'élaboration de ce concept :

Waffenschmidt S, Hermanns T, Gerber-Grote A, Mostardt S. No suitable precise or optimized epidemiologic search filters were available for bibliographic databases. *J Clin Epidemiol.* 2017 Feb;82:112-118. doi: 10.1016/j.jclinepi.2016.08.008. Epub 2016 Aug 26. PubMed [PMID: 27570049](https://pubmed.ncbi.nlm.nih.gov/27570049/).

Workneh MH, Bjune GA, Yimer SA. Prevalence and associated factors of tuberculosis and diabetes mellitus comorbidity: A systematic review. PLoS One. 2017 Apr 21;12(4):e0175925. doi: 10.1371/journal.pone.0175925. eCollection 2017. Review. PubMed [PMID: 28430796](https://pubmed.ncbi.nlm.nih.gov/28430796/).

5. Stratégies de recherche pour les bases de données

Embase.com

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

('aged'/de OR 'frail elderly'/de OR 'very elderly'/exp OR 'elderly care'/de OR 'geriatric care'/exp OR 'geriatric patient'/de OR 'geriatrics'/exp OR (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing):ab,ti,kw) AND ('alcoholism'/exp OR 'drinking behavior'/exp OR 'alcohol consumption'/exp OR 'alcohol abuse'/exp OR (alcohol* OR drunk*):ab,ti,kw OR (drink*:ab,ti,kw NOT ('dysphagia'/exp OR 'drinking'/exp OR 'drinking water'/exp OR 'fluid intake'/de OR (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*)):ab,ti,kw))) AND ('comorbidity'/de OR 'comorbidity assessment'/exp OR 'disease association'/de OR (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) NEAR/2 associat*)):ab,ti,kw OR 'hypertension'/exp OR (hypertension OR "blood pressure*" OR hypertensive):ab,ti,kw OR 'mood disorder'/exp OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) NEXT/3 disorder*)):ab,ti,kw OR 'pain'/exp OR (pain OR pains OR "physical suffering*" OR ache OR aches):ab,ti,kw OR 'liver disease'/exp OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis):ab,ti,kw OR 'sleep disorder'/exp OR 'insomnia'/exp OR ((sleep NEAR/3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*):ab,ti,kw OR 'cognitive defect'/exp OR (((cognition OR neurocognitive OR consciousness) NEXT/3 disorder*) OR (cognitive NEXT/3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*):ab,ti,kw OR 'diabetes mellitus'/exp OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*"):ab,ti,kw OR 'anxiety disorder'/exp OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*"):ab,ti,kw) AND ('epidemiology'/de OR 'epidemiology'/lnk OR 'health survey'/exp OR 'incidence'/de OR 'prevalence'/de OR 'morbidity'/de OR 'population'/exp OR 'population research'/de OR 'population risk'/de OR 'population statistics'/exp OR 'screening'/de OR 'mass screening'/de OR (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort):ab,ti,kw OR 'cohort analysis'/de OR 'case control study'/de OR 'population based case control study'/de OR 'cross-sectional study'/de OR 'follow up'/de OR 'longitudinal study'/de OR 'retrospective study'/de OR ("case-control stud*" OR ("cross sectional" NEXT/3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective NEXT/3 (study OR studies OR design)) OR survey OR surveys OR screening):ab,ti,kw) NOT (([conference abstract]/lim AND [<1966-2016]/py) NOT ([animals]/lim NOT [humans]/lim))

24'828	références trouvées le	2 septembre 2019
Commentaire(s) :	Nous avons exclu les références des "conferences abstracts" avant 2017, partant du principe qu'elles ont fait l'objet d'une publication. Limites utilisées : NOT ([conference abstract]/lim AND [<1966-2016]/py) NOT ([animals]/lim NOT [humans]/lim)	

Medline Ovid SP

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to April 11, 2019

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#) (décocher case "Map Term to Subject Heading")

(exp Aged/ OR "Geriatric Nursing"/ OR "Geriatric Assessment"/ OR "Geriatrics"/ OR Geriatric Psychiatry/ OR (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older ADJ1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing).ab,ti,kf.) AND (alcoholism/ OR drinking behavior/ OR binge drinking/ OR alcohol drinking/ OR (alcohol* OR drunk*).ab,ti,kf. OR (drink*.ab,ti,kf. NOT (exp "Deglutition Disorders"/ OR "Drinking"/ OR "Drinking Water" OR (deglutition-disorder* OR dysphagia* OR (water ADJ1 drink*).ab,ti,kf.))) AND ("Comorbidity"/ OR (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) ADJ2 associat*).ab,ti,kf. OR exp "Hypertension"/ OR (hypertension OR "blood pressure*" OR hypertensive).ab,ti,kf. OR exp "Mood Disorders"/ OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) ADJ3 disorder*).ab,ti,kf. OR exp "Pain"/ OR (pain OR pains OR "physical suffering*" OR ache OR aches).ab,ti,kf. OR exp "Liver Diseases"/ OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis).ab,ti,kf. OR exp "Sleep Wake Disorders"/ OR ((sleep ADJ3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*).ab,ti,kf. OR exp "Cognition Disorders"/ OR "Cognitive Dysfunction"/ OR exp "Dementia"/ OR (((cognition OR neurocognitive OR consciousness) ADJ3 disorder*) OR (cognitive ADJ3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*).ab,ti,kf. OR exp "Diabetes Mellitus"/ OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*).ab,ti,kf. OR exp "Anxiety Disorders"/ OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*).ab,ti,kf.) AND ("Epidemiology"/ OR exp "Epidemiologic Methods"/ OR "epidemiology".fs. OR "Incidence"/ OR "Prevalence"/ OR "Morbidity"/ OR "Health Surveys"/ OR exp "Population Surveillance"/ OR "Epidemiologic Measurements"/ OR exp "Population"/ OR exp "Epidemiologic Methods"/ OR "Mass Screening"/ OR (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort).ab,ti,kf. OR exp "Epidemiologic Studies"/ OR ("case-control stud*" OR ("cross sectional" ADJ3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective ADJ3 (study OR studies OR design)) OR survey OR surveys OR screening).ab,ti,kf.) NOT (animals NOT humans).sh.

22'765	références trouvées le	2 septembre 2019
Commentaire(s) :	Limite utilisée : NOT (animals NOT humans).sh.	

PubMed

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(elder*[tiab] OR eldest[tiab] OR geriatr*[tiab] OR "old aged"[tiab] OR "oldest old*" [tiab] OR "very old*" [tiab] OR older patient*[tiab] OR "older people"[tiab] OR older subject*[tiab] OR older age*[tiab] OR older adult*[tiab] OR "older man"[tiab] OR "older men"[tiab] OR older male*[tiab] OR "older woman"[tiab] OR "older women"[tiab] OR older female*[tiab] OR older population*[tiab] OR older person*[tiab] OR aging[tiab] OR ageing[tiab]) AND (alcohol*[tiab] OR drunk*[tiab] OR (drink*[tiab] NOT (deglutition-disorder*[tiab] OR dysphagia*[tiab] OR water drink*[tiab]))) AND (comorbid*[tiab] OR co-morbid*[tiab] OR co-occurr*[tiab] OR cooccurr*[tiab] OR ((disease*[tiab] OR sickness*[tiab]) AND associat*[tiab]) OR hypertension[tiab] OR blood pressure*[tiab] OR

hypertensive[tiab] OR mood disorder*[tiab] OR depression*[tiab] OR bipolar[tiab] OR depressive[tiab] OR dysthymia[tiab] OR melancholia[tiab] OR melancholy[tiab] OR mourning[tiab] OR ((dysthymic[tiab] OR affective[tiab] OR cyclothymic[tiab]) AND disorder*[tiab]) OR pain[tiab] OR pains[tiab] OR physical suffering*[tiab] OR ache[tiab] OR aches[tiab] OR liver[tiab] OR hepatic[tiab] OR hepatit*[tiab] OR hepatitis[tiab] OR hepatopathy[tiab] OR cirrhosis[tiab] OR (sleep[tiab] AND (disorder*[tiab] OR disturbance*[tiab] OR dysfunction*[tiab])) OR dyssomnia*[tiab] OR insomnia*[tiab] OR sleepless*[tiab] OR ((cognition[tiab] OR neurocognitive[tiab] OR consciousness[tiab]) AND disorder*[tiab]) OR (cognitive[tiab] AND (defect*[tiab] OR deficit*[tiab] OR disab*[tiab] OR disorder*[tiab] OR dysfunction*[tiab] OR impairment*[tiab])) OR dementia[tiab] OR executive dysfunction*[tiab] OR amnesia[tiab] OR korsakoff[tiab] OR huntington[tiab] OR delirium[tiab] OR alzheimer[tiab] OR "creutzfeldt jakob"[tiab] OR "kluver bucy"[tiab] OR "kluver bucy"[tiab] OR "lewy body"[tiab] OR "lewy bodies"[tiab] OR "alcoholic psychosis"[tiab] OR "toxic psychoses"[tiab] OR "amyotrophic lateral sclerosis"[tiab] OR "corticobasal degeneration"[tiab] OR multiple system atroph*[tiab] OR parkinson*[tiab] OR diabetes[tiab] OR diabetic*[tiab] OR prediabetic*[tiab] OR glucose intolerance*[tiab] OR anxiety[tiab] OR acute stress disorder*[tiab] OR distress syndrome*[tiab] OR "obsessive compulsive"[tiab] OR panic[tiab] OR phobia*[tiab] OR phobic disorder*[tiab] OR "posttraumatic stress"[tiab] OR "post-traumatic stress"[tiab] OR neurotic disorder*[tiab]) AND (epidemiol*[tiab] OR prevalen*[tiab] OR inciden*[tiab] OR morbidity[tiab] OR "general population"[tiab] OR "population based"[tiab] OR surveillance[tiab] OR cohort[tiab] OR case-control stud*[tiab] OR ("cross sectional" AND (study[tiab] OR studies[tiab] OR design[tiab] OR research[tiab])) OR follow-up stud*[tiab] OR followup stud*[tiab] OR longitudinal stud*[tiab] OR "longitudinal evaluation"[tiab] OR (retrospective[tiab] AND (study[tiab] OR studies[tiab] OR design[tiab])) OR survey[tiab] OR surveys[tiab] OR screening[tiab]) NOT medline[sb]

692	références trouvées le	2 septembre 2019
Commentaire(s) :	Recherche limitée aux références non indexées pour Medline : NOT medline[sb]	

CINAHL EBSCO

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

(MH "Aged" OR MH "Aged, 80 and Over" OR MH "Frail Elderly" OR MH "Gerontologic Nursing+" OR MH "Geriatric Assessment+" OR MH "Geriatrics" OR MH "Geriatric Psychiatry" OR TI (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older W1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing) OR AB (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older W1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing)) AND (MH "Alcoholism" OR MH "Alcohol Abuse+" OR MH "Drinking Behavior+" OR MH "Alcohol Drinking" OR MH "Binge Drinking" OR TI (alcohol* OR drunk*) OR (TI (drink*) NOT (MH "Deglutition Disorders" OR MH "Water Supply" OR MH "Fluid Intake" OR TI (deglutition-disorder* OR dysphagia* OR (water N1 drink*)))) OR AB (alcohol* OR drunk*) OR (AB (drink*) NOT (MH "Deglutition Disorders" OR MH "Water Supply" OR MH "Fluid Intake" OR AB (deglutition-disorder* OR dysphagia* OR (water N1 drink*)))) AND (MH "Comorbidity" OR TI (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) N1 associat*)) OR AB (comorbid* OR co-morbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) N1 associat*)) OR MH "Hypertension+" OR TI (hypertension OR "blood pressure*" OR hypertensive) OR AB (hypertension OR "blood pressure*" OR hypertensive) OR MH "Affective Disorders+" OR TI ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) W2 disorder*)) OR AB ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) W2 disorder*)) OR MH "Pain+" OR TI (pain OR pains OR "physical suffering*" OR ache OR aches) OR AB (pain OR pains OR "physical suffering*" OR ache OR aches) OR MH "Liver Diseases+" OR TI (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis) OR AB (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis) OR MH "Sleep Disorders+" OR TI ((sleep N2 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*) OR AB ((sleep N2 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*) OR MH "Cognition Disorders+" OR MH "Dementia+"

OR TI (((cognition OR neurocognitive OR consciousness) W2 disorder*) OR (cognitive W2 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*) OR AB (((cognition OR neurocognitive OR consciousness) W2 disorder*) OR (cognitive W2 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*) OR MH "Diabetes Mellitus+" OR TI (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*") OR AB (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*") OR MH "Anxiety Disorders+" OR TI (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*") OR AB (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*") AND (MH "Epidemiology+" OR MW epidemiology OR MH "Incidence" OR MH "Prevalence" OR MH "Morbidity" OR MH "Epidemiological Research" OR MH "Population" OR MH "Rural Population" OR MH "Suburban Population" OR MH "Urban Population" OR MH "Health Screening" OR TI (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort) OR AB (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort) OR MH "Prospective Studies+" OR MH "Case Control Studies" OR MH "Population-Based Case Control" OR MH "Cross Sectional Studies" OR TI ("case-control stud*" OR ("cross sectional" W2 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective W2 (study OR studies OR design)) OR survey OR surveys OR screening) OR AB ("case-control stud*" OR ("cross sectional" W2 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective W4 (study OR studies OR design)) OR survey OR surveys OR screening) NOT (MH "Animals" NOT MH "humans")

5624	références trouvées le	2 septembre 2019
Commentaire(s) :		

PsycINFO Ovid SP

PsycINFO 1806 to April Week 2 2019

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#) (décocher case "Map Term to Subject Heading")

(geriatrics/ OR geriatric assessment/ OR geriatric patients/ OR geriatric psychiatry/ OR elder care/ OR aging in place/ OR (elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older ADJ1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing).ab,ti.) AND (exp alcohol abuse/ OR drinking behavior/ OR alcohol drinking patterns/ OR (alcohol* OR drunk*).ab,ti. OR (drink*.ab,ti. NOT (dysphagia/ OR exp fluid intake/ OR (deglutition-disorder* OR dysphagia* OR (water ADJ1 drink*).ab,ti.))) AND (comorbidity/ OR (comorbid* OR comorbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) ADJ2 associat*).ab,ti. OR exp hypertension/ OR (hypertension OR "blood pressure*" OR hypertensive).ab,ti. OR exp affective disorders/ OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) ADJ3 disorder*).ab,ti. OR exp pain/ OR pain measurement/ OR (pain OR pains OR "physical suffering*" OR ache OR aches).ab,ti. OR exp liver disorders/ OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis).ab,ti. OR exp sleep disorders/ OR ((sleep ADJ3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*).ab,ti. OR cognitive impairment/ OR exp dementia/ OR (((cognition OR neurocognitive OR consciousness) ADJ3 disorder*) OR (cognitive ADJ3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR

"kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*).ab,ti. OR exp diabetes mellitus/ OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*").ab,ti. OR exp anxiety disorders/ OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*").ab,ti.) AND (epidemiology/ OR morbidity/ OR exp population/ OR screening/ OR health screening/ OR (epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort).ab,ti. OR cohort analysis/ OR followup studies/ OR exp longitudinal studies/ OR retrospective studies/ OR ("case-control stud*" OR ("cross sectional" ADJ3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective ADJ3 (study OR studies OR design)) OR survey OR surveys OR screening).ab,ti.)

1380	références trouvées le	2 septembre 2019
Commentaire(s) :	Dans PsycInfo, "limit humans" ne fonctionne pas.	

Central - Cochrane Library Wiley

Cochrane Central Register of Controlled Trials

Issue 4 of 12, April 2019

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#) (puis sélectionner « Trials » sous « All Results »)

(elder* OR eldest OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR (older NEXT/1 (patient* OR people OR subject* OR age* OR adult* OR man OR men OR male* OR woman OR women OR female* OR population* OR person*)) OR aging OR ageing):kw,ti,ab AND ((alcohol* OR drunk*):kw,ti,ab OR (drink*:kw,ti,ab NOT (deglutition-disorder* OR dysphagia* OR (water NEAR/1 drink*)):kw,ti,ab)) AND ((comorbid* OR comorbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) NEAR/2 associat*)):kw,ti,ab OR (hypertension OR "blood pressure*" OR hypertensive):kw,ti,ab OR ("mood disorder*" OR depression* OR bipolar OR depressive OR dysthymia OR melancholia OR melancholy OR mourning OR ((dysthymic OR affective OR cyclothymic) NEXT/3 disorder*)):kw,ti,ab OR (pain OR pains OR "physical suffering*" OR ache OR aches):kw,ti,ab OR (liver OR hepatic OR hepatit* OR hepatitis OR hepatopathy OR cirrhosis):kw,ti,ab OR ((sleep NEAR/3 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*):kw,ti,ab OR (((cognition OR neurocognitive OR consciousness) NEXT/3 disorder*) OR (cognitive NEXT/3 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR dementia OR "executive dysfunction*" OR amnesia OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*):kw,ti,ab OR (diabetes OR diabetic* OR prediabetic* OR "glucose intolerance*"):kw,ti,ab OR (anxiety OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR panic OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*"):kw,ti,ab) AND ((epidemiol* OR prevalen* OR inciden* OR morbidity OR "general population" OR "population based" OR surveillance OR cohort):kw,ti,ab OR ("case-control stud*" OR ("cross sectional" NEXT/3 (study OR studies OR design OR research)) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR (retrospective NEXT/3 (study OR studies OR design)) OR survey OR surveys OR screening):kw,ti,ab)

413	références trouvées le	2 septembre 2019
Commentaire(s) :		

Web of Science – Core collection

Stratégie avec syntaxe adaptée à copier/coller dans base de donnée [ici](#)

TS=(elder* OR "eldest" OR geriatr* OR "old aged" OR "oldest old*" OR "very old*" OR ("older" NEAR/1 (patient* OR "people" OR subject* OR age* OR adult* OR "man" OR "men" OR male* OR "woman" OR "women" OR female* OR population* OR person*)) OR "aging" OR "ageing") AND (TS=(alcohol* OR drunk*) OR (TS=(drink*) NOT TS=(deglutition-disorder* OR dysphagia* OR ("water" NEAR/1 drink*))) AND (TS=(comorbid* OR comorbid* OR co-occurr* OR cooccurr* OR ((disease* OR sickness*) NEAR/1 associat*)) OR TS=("hypertension" OR "blood pressure*" OR "hypertensive") OR TS=("mood disorder*" OR depression* OR "bipolar" OR "depressive" OR "dysthymia" OR "melancholia" OR "melancholy" OR "mourning" OR ((("dysthymic" OR "affective" OR "cyclothymic") NEAR/2 disorder*)) OR TS=("pain" OR "pains" OR "physical suffering*" OR "ache" OR "aches") OR TS=("liver" OR "hepatic" OR hepatit* OR "hepatis" OR "hepatopathy" OR "cirrhosis") OR TS=(("sleep" NEAR/2 (disorder* OR disturbance* OR dysfunction*)) OR dyssomnia* OR insomnia* OR sleepless*) OR TS=((("cognition" OR "neurocognitive" OR "consciousness") NEAR/2 disorder*) OR ("cognitive" NEAR/2 (defect* OR deficit* OR disab* OR disorder* OR dysfunction* OR impairment*)) OR "dementia" OR "executive dysfunction*" OR "amnesia" OR korsakoff OR huntington OR delirium OR alzheimer OR "creutzfeldt jakob" OR "kluver bucy" OR "kluever bucy" OR "lewy body" OR "lewy bodies" OR "alcoholic psychosis" OR "toxic psychoses" OR "amyotrophic lateral sclerosis" OR "corticobasal degeneration" OR "multiple system atroph*" OR parkinson*) OR TS=("diabetes" OR diabetic* OR prediabetic* OR "glucose intolerance*") OR TS=("anxiety" OR "acute stress disorder*" OR "distress syndrome*" OR "obsessive compulsive" OR "panic" OR phobia* OR "phobic disorder*" OR "posttraumatic stress" OR "post-traumatic stress" OR "neurotic disorder*")) AND (TS=(epidemiol* OR prevalen* OR inciden* OR "morbidity" OR "general population" OR "population based" OR "surveillance" OR "cohort") OR TS=("case-control stud*" OR ("cross sectional" NEAR/2 ("study" OR "studies" OR "design" OR "research")) OR "follow-up stud*" OR "followup stud*" OR "longitudinal stud*" OR "longitudinal evaluation" OR ("retrospective" NEAR/2 ("study" OR "studies" OR "design")) OR "survey" OR "surveys" OR "screening"))

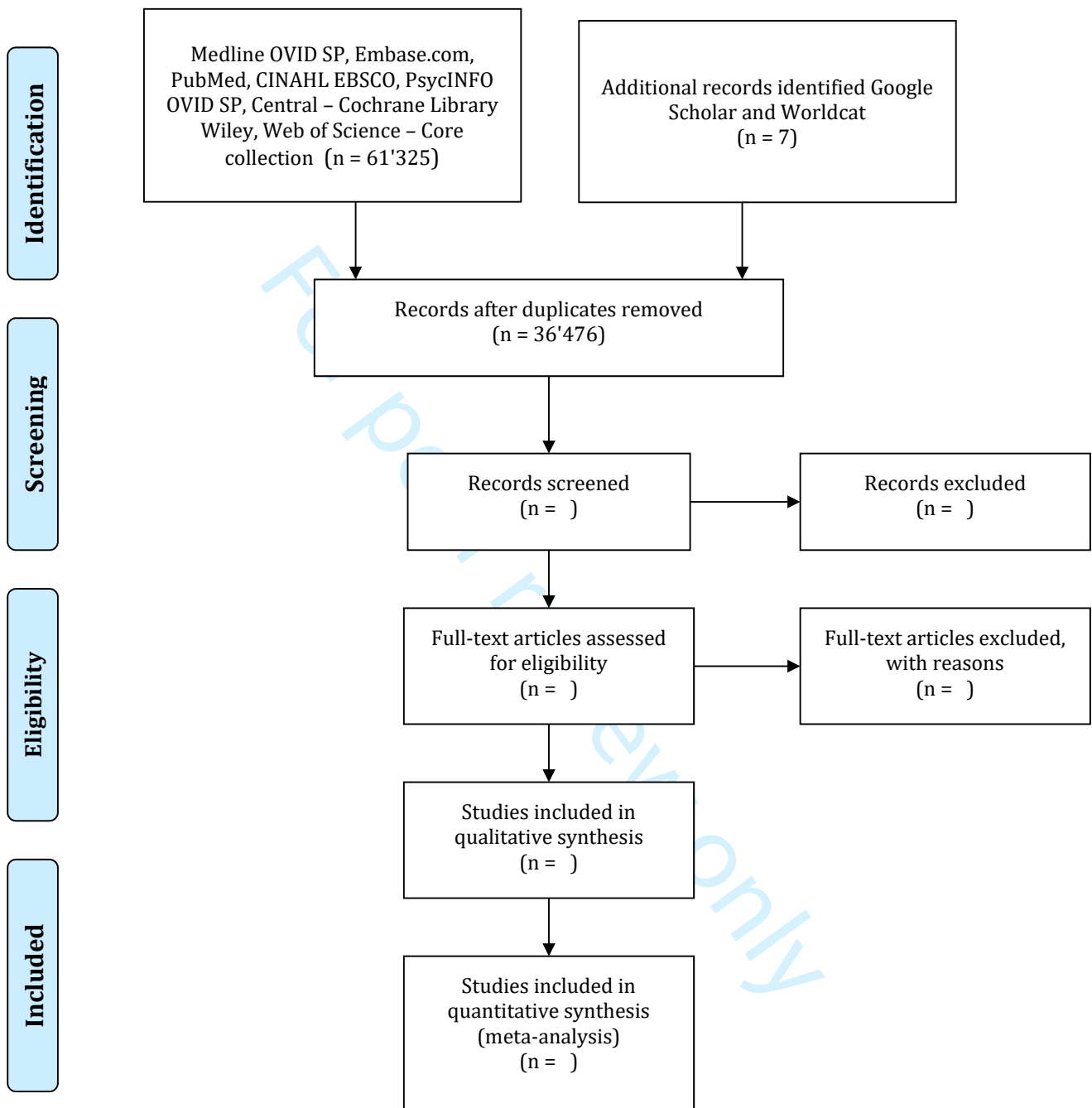
5623	références trouvées le	2 septembre 2019
Commentaire(s) :		

6. Résultats

L'ordre d'importation dans Endnote suit l'ordre ci-après :

Base de données	Date de la recherche	Nombre de références...	
		...trouvées...	...et après dédoublement
Medline OVID SP	02.09.19	22'765	22'760
Embase.com	02.09.19	24'828	11'186
PubMed	02.09.19	692	98
CINAHL EBSCO	02.09.19	5'624	843
PsycINFO OVID SP	02.09.19	1'380	296
Central – Cochrane Library Wiley	02.09.19	413	174
Web of Science – Core collection	02.09.19	5'623	1'119
Total		61'325	36'476

Suppl. 3



Source: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

Data extraction form - SECOND ROUND

EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES AMONG HOME-DWELLING OLDER ADULTS

General Information – Study ID:

Date form completed (dd/mm/yyyy):	Name person extracting data:
Publication title : (title of paper/ abstract/ reports that data is extracted from):	

Eligibility (exclude if one of the follow reference is unclear)

Study Characteristics	Inclusion Criteria	Yes/No/Unclear	Location in text (pg & ¶/fig/table)
Type of study	Randomised trial		
	Cluster randomised controlled trial (CRCT)		
	Non-randomised trial – Quasi experimental study		
	Retrospective or prospective epidemiological study		
	Cohort study		
	Controlled before-and-after study <ul style="list-style-type: none"> Contemporaneous data collection At least 2 intervention and 2 control clusters 		
	Interrupted time series OR repeated measures study <ul style="list-style-type: none"> At least 3 time-points before and 3 after the intervention Clearly defined intervention point 		
	Case-control study		
Language	French, German, English, Spanish and Chinese		
Participants	<ul style="list-style-type: none"> Home-dwelling adults a minimum mean age of 60 age (age minimum age 55 age) At least 1 alcoholic drink per day without acception (glas, onz 		
Types of intervention	Epidemiology (incidence – prevalence – occurrence) Measurement of at-risk drinking / alcoholism/alcohol abuse/alcohol		
Types of outcome measures	Primary outcome : <ul style="list-style-type: none"> Epidemiology of at-risk alcohol consumption, Age of onset Severity of alcohol use (amount). Secondary outcome measures: <ul style="list-style-type: none"> Psychiatric and somatic comorbidities frequently occurring in home-dwelling older adults with at-risk alcohol consumption; Documentation of tools and the measurement of comorbidities associated with at-risk drinking; Presence of epidemiological data on very old adults' drinking habits; Associations between drinking volume and alcohol-related harm 		
Decision:	<input type="radio"/> Excluded <input type="radio"/> Included		
Reason for exclusion			
Notes:			

DO NOT PROCEED IF STUDY EXCLUDED FROM REVIEW

Definitions

Assumed risk estimate	An estimate of the risk of an event or average score without the intervention, used in Cochrane 'Summary of findings tables'. If a study provides useful estimates of the risk or average score of different subgroups of the population, or an estimate based on a representative observational study, you may wish to collect this information.
Bias	A systematic error or deviation in results or inferences from the truth. In studies of the effects of health care, the main types of bias arise from systematic differences in the groups that are compared (selection bias), the care that is provided, exposure to other factors apart from the intervention of interest (performance bias), withdrawals or exclusions of people entered into a study (attrition bias) or how outcomes are assessed (detection bias). Reviews of studies may also be particularly affected by reporting bias, where a biased subset of all the relevant data is available.
Change from baseline	A measure for a continuous outcome calculated as the difference between the baseline score and the post-intervention score.
Clusters	A group of participants who have been allocated to the same intervention arm together, as in a cluster-randomised trial, e.g. a whole family, town, school or patients in a clinic may be allocated to the same intervention rather than separately allocating each individual to different arms.
Co-morbidities	The presence of one or more diseases or conditions other than those of primary interest. In a study looking at treatment for one disease or condition, some of the individuals may have other diseases or conditions that could affect their outcomes.
Compliance	Participant behaviour that abides by the recommendations of a doctor, other health care provider or study investigator (also called adherence or concordance).
Contemporaneous data collection	When data are collected at the same point(s) in time or covering the same time period for each intervention arm in a study (that is, historical data are not used as a comparison).
Controlled Before and After Study (CBA)	A non-randomised study design where a control population of similar characteristics and performance as the intervention group is identified. Data are collected before and after the intervention in both the control and intervention groups
Exclusions	Participants who were excluded from the study or the analysis by the investigators.
Imputation	Assuming a value for a measure where the true value is not available (e.g. assuming last observation carried forward for missing participants).
Integrity of delivery	The degree to which the specified procedures or components of an intervention are delivered as originally planned.
Interrupted Time Series (ITS)	A research design that collects observations at multiple time points before and after an intervention (interruption). The design attempts to detect whether the intervention has had an effect significantly greater than the underlying trend.
Post-intervention	The value of an outcome measured at some time point following the beginning of the intervention (may be during or after the intervention period).
Power	In clinical trials, power is the probability that a trial will obtain a statistically significant result when the true intervention effect is a specified size. For a given size of effect, studies with more participants have greater power. Note that power should not be considered in the risk of bias assessment.
Providers	The person or people responsible for delivering an intervention and related care, who may or may not require specific qualifications (e.g. doctors, physiotherapists) or training.
Quasi-randomised controlled trial	A study in which the method of allocating people to intervention arms was not random, but was intended to produce similar groups when used to allocate participants. Quasi-random methods include: allocation by the person's date of birth, by the day of the week or month of the year, by a person's medical record number, or just allocating every alternate person.
Reanalysis	Additional analysis of a study's results by a review author (e.g. to introduce adjustment for correlation that was not done by the study authors).

Sociodemographics	Social and demographic information about a study or its participants, including economic and cultural information, location, age, gender, ethnicity, etc.
Theoretical basis	The use of a particular theory (such as theories of human behaviour change) to design the components and implementation of an intervention
Unit of allocation	The unit allocated to an intervention arm. In most studies individual participants will be allocated, but in others it may be individual body parts (e.g. different teeth or joints may be allocated separately) or clusters of multiple people.
Unit of analysis	The unit used to calculate N in an analysis, and for which the result is reported. This may be the number of individual people, or the number of body parts or clusters of people in the study.
Unit of measurement	The unit in which an outcome is measured, e.g. height may be measured in cm or inches; depression may be measured using points on a particular scale.
Validation	A process to test and establish that a particular measurement tool or scale is a good measure of that outcome.
Withdrawals	Participants who voluntarily withdrew from participation in a study before the completion of outcome measurement.

Methods

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
1. Aim of study		
2. Design (e.g. parallel, crossover, non-RCT)		
3. Unit of allocation (by individuals, cluster/groups or body parts)		
4. Start date		
5. End date		
6. Duration of participation (from recruitment to last follow-up)		
7. Notes:		

Population and setting – epidemiological data

	Description Include comparative information for each group (i.e. intervention and controls) if available	Location in text (pg & ¶/fig/table)
8. Population description (from which study participants are drawn)		
9. Baseline characteristics	Sex Male:.....Female: Age Average:.....Median: SD / IQR Range Min-Max	
10. Race / ethnicity		

	Description <i>Include comparative information for each group (i.e. intervention and controls) if available</i>	Location in text <i>(pg & ¶/fig/table)</i>
11. Setting <i>(including location and social context)</i>		
12. Inclusion criteria		
13. Exclusion criteria		
14. Recruitment of participants		
15. Length of follow-up		
16. Follow-up characteristics		
17. Target population and final number of subjects studied for outcome		

Participants

	Description as stated in report/paper	Location in text <i>(pg & /fig/table)</i>
18. Total number randomised <i>(or total pop. at start of study for NRCTs)</i>		
19. Clusters <i>(if applicable, no., type, no. people per cluster)</i>		
20. Baseline imbalances (if applicable)		
21. Withdrawals and exclusions <i>(if not provided below by the outcome)</i>		
22. Severity of illness		
23. Comorbidities		
24. Other treatments received <i>(additional to study intervention)</i>		
25. Other relevant socio-demographics		
26. Subgroups measured		
27. Subgroups reported		
28. Notes:		

Intervention groups

	Description as stated in report/paper	Location in text <i>(pg & ¶/fig/table)</i>
29. Group name		

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
30. No. randomised to group (specify whether no. people or clusters)		
31. Description (include sufficient detail for replication, e.g. content, dose, components; if it is a natural experiment, describe the pre-intervention)		
32. Duration of treatment period		
33. Timing (e.g. frequency, duration of each episode)		
34. Delivery (e.g. mechanism, medium, intensity, fidelity)		
35. Providers (e.g. no., profession, training, ethnicity, etc. if relevant)		
36. Co-interventions		
37. Economic variables (i.e. intervention cost changes in other costs as result of intervention)		
38. Resource requirements to replicate intervention (e.g. staff numbers, cold chain, equipment)		
39. Notes:		

Control Group

	Description as stated in report/paper	Location in text (pg & /fig/table)
40. Group name		
41. No. randomised to group (specify whether no. people or clusters)		
42. Description (include sufficient detail for replication, e.g. content, dose, components; if it is a natural experiment, describe the pre-intervention)		
43. Duration of treatment period		
44. Timing (e.g. frequency, duration of each episode)		
45. Delivery (e.g. mechanism, medium, intensity, fidelity)		
46. Providers (e.g. no., profession, training, ethnicity, etc. if relevant)		
47. Co-interventions		

	Description as stated in report/paper	Location in text (pg & /fig/table)
48. Economic variables <i>(i.e. intervention cost, changes in other costs as result of intervention)</i>		
49. Resource requirements to replicate intervention <i>(e.g. staff numbers, cold chain, equipment)</i>		
50. Notes:		

Outcomes

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
51. Outcome name		
52. Time-points measured <i>(specify whether from start or end of intervention)</i>		
53. Time-points reported		
54. Outcome definition <i>(with diagnostic criteria if relevant and note whether the outcome is desirable or undesirable if this is not obvious)</i>		
55. Person measuring/ reporting		
56. Unit of measurement <i>(if relevant)</i>		
57. Scales: upper and lower limits <i>(indicate whether high or low score is good)</i>		
58. Is outcome/tool validated?	Yes/No/Unclear	
59. Imputation of missing data <i>(e.g. assumptions made for Intention To Treat analysis)</i>		
60. Assumed risk estimate <i>(e.g. baseline or population risk noted in Background)</i>		
61. Notes:		

Results

For randomised or non-randomised trial with dichotomous outcomes

	Description as stated in report/paper				Location in text (pg & /fig/table)
62. Comparison					
63. Outcome					
64. Subgroup					
65. Time point <i>(specify whether from start or end of intervention)</i>					
66. Results <i>Note whether:</i>	Intervention		Comparison		
	No. events	No. participants	No. events	No. participants	

	Description as stated in report/paper				Location in text (pg & /fig/table)
1 2 3 4 5 6 7	... post-intervention OR ... change from baseline And whether ... Adjusted OR ...Unadjusted				
8	67. Baseline data		Intervention	Comparison	
9		No. events	No. participants	No. events	No. participants
10					
11	68. No. missing participants and reasons				
12	69. No. participants moved from other groups and reasons				
13	70. Any other results reported				
14	71. Unit of analysis (e.g. by individuals, health professionals, practice, hospital, community)				
15	72. Statistical methods used and appropriateness of these methods (e.g. adjustment for correlation)				
16	73. Reanalysis required? (if yes, specify why, e.g. correlation adjustment)	...	Yes/No/Unclear		
17	74. Reanalysis possible?	...	Yes/No/Unclear		
18	75. Reanalysed results				
19	76. Notes:				

For randomised or non-randomised trials with continuous outcomes

	Description as stated in report/paper						Location in text (pg & /fig/table)	
38	77. Comparison							
39	78. Outcome							
40	79. Subgroup							
41	80. Time point (specify whether from start or end of intervention)							
42	81. Post-intervention or change from the baseline?							
43	82. Results Note whether: ... post-intervention OR ... change from baseline And whether ... Adjusted OR ...Unadjusted	Intervention			Comparison			
44		Mean	SD (or other variance)	No. participants	Mean	SD (or other variance)	No. participants	
45								
46	83. Baseline data			Intervention			Comparison	

		Description as stated in report/paper					Location in text (pg & /fig/table)
	Mean	SD (or other variance)	No. participants	Mean	SD (or other variance)	No. participants	
84. No. missing participants and reasons							
85. No. participants moved from other groups and reasons							
86. Any other results reported							
87. Unit of analysis (e.g. by individuals, health professionals, practice, hospital, community)							
88. Statistical methods used and appropriateness of these methods (e.g. adjustment for correlation)							
89. Reanalysis required? (if yes, specify why)	...	Yes/No/Unclear					
90. Reanalysis possible?	...	Yes/No/Unclear					
91. Reanalysed results							
92. Notes:							

For randomised or non-randomised trial with other outcomes

		Description as stated in report/paper				Location in text (pg & ¶/fig/table)
93. Comparison						
94. Outcome						
95. Subgroup						
96. Time point (specify whether from start or end of intervention)						
97. Type of outcome						
98. Results	Intervention result	SD (or other variance)	Control result	SD (or other variance)		
	Overall results		SE (or other variance)			
99. No. participants	Intervention		Control			
100. No. missing participants and reasons						
101. No. participants moved from other groups and reasons						
102. Any other results reported						

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
103. Unit of analysis (<i>e.g. by individuals, health professionals, practice, hospital, community</i>)		
104. Statistical methods used and appropriateness of these methods		
105. Reanalysis required? (<i>if yes, specify why</i>)		
106. Reanalysis possible?		
107. Reanalysed results		
108. Notes:		

For controlled before–after studies

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
109. Comparison		
110. Outcome		
111. Subgroup		
112. Time point (<i>specify whether from start or end of intervention</i>)		
113. Post-intervention or change from the baseline?		
114. Results	Intervention result	SD (or other variance)
	Control result	SD (or other variance)
	Overall results	SE (or other variance)
115. No. participants	Intervention	Control
116. No. missing participants and reasons		
117. No. participants moved from other groups and reasons		
118. Any other results reported		
119. Unit of analysis (<i>e.g. by individuals, cluster/groups or body parts</i>)		
120. Statistical methods used and appropriateness of these methods		
121. Reanalysis required? (<i>specify</i>)	... Yes/No/Unclear	
122. Reanalysis possible?	... Yes/No/Unclear	
123. Reanalysed results		

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
124. Notes:		

For interrupted time series or repeated measures study

	Description as stated in report/paper	Location in text (pg & /fig/table)
125. Comparison		
126. Outcome		
127. Subgroup		
128. Length of time-points measured (e.g. days, months)		
Total period measured		
129. No. participants measured		
130. No. missing participants and reasons		
131. No. time-points measured	132. Pre-intervention	133. Post-intervention
134. Mean value (with variance measure)		
135. Difference in means (post-pre)		
136. Percentage of relative change		
137. Result reported by authors (with variance measure)		
138. Unit of analysis (e.g. by individuals or cluster/groups)		
139. Statistical methods used and appropriateness of these methods		
140. Reanalysis required? (specify)	... Yes/No/Unclear	
141. Reanalysis possible?	... Yes/No/Unclear	
142. Individual time-point results		
143. Read from figures?	... Yes/No/Unclear	
144. Reanalysed results	Change in level	SE
145. Notes:		

Applicability

146. Have important populations been excluded from the study? (consider disadvantaged populations and possible differences in the intervention effect)	... Yes/No/Unclear	
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1 2 3 4 5	147. Is the intervention likely to be aimed at disadvantaged groups? <i>(e.g. lower socioeconomic groups)</i>	... Yes/No/Unclear	
6 7 8 9	148. Does the study directly address the review question? <i>(any issues of partial or indirect applicability)</i>	... Yes/No/Unclear	
10	149. Notes:		

Other information

	Description as stated in report/paper	Location in text <i>(pg & ¶/fig/table)</i>
150. Key conclusions by study authors		
151. References to other relevant studies		
152. Correspondence required for further study information <i>(what and from whom)</i>		
153. Further study information requested <i>(from whom, what and when)</i>		
154. Correspondence received <i>(from whom, what and when)</i>		
155. Note:		

Risk of Bias assessment for RCTs

Domain	Risk of bias <i>Low/ High/Unclear</i>	Support for judgment	Location in text <i>(pg & ¶/fig/table)</i>
156. Random sequence generation <i>(selection bias)</i>			
157. Allocation concealment <i>(selection bias)</i>			
158. Blinding of participants and personnel <i>(performance bias)</i>		Outcome group: All/	
<i>(if required)</i>		Outcome group:	
159. Blinding of outcome assessment <i>(detection bias)</i>		Outcome group: All/	
<i>(if required)</i>		Outcome group:	
160. Incomplete outcome data <i>(attrition bias)</i>			
161. Selective outcome reporting? <i>(reporting bias)</i>			
162. Other bias			
163. Notes:			