PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	EPIDEMIOLOGY OF AT-RISK ALCOHOL USE AND ASSOCIATED COMORBIDITIES OF INTEREST AMONG COMMUNITY-DWELLING OLDER ADULTS: a protocol for a systematic review
AUTHORS	Latanioti, Maria; Schuster, Jean-Pierre; Rosselet Amoussou, Joelle; Strippoli, Marie-Pierre; Von-Gunten, Armin; Ebbing, Karsten; Verloo, Henk

VERSION 1 – REVIEW

REVIEWER	Paul Sacco University of Maryland-Baltimore USA
REVIEW RETURNED	11-Feb-2019

GENERAL COMMENTS	Dear Authors: Thank you for the opportunity to review the protocol “Epidemiology of At-Risk Alcohol Use and Associated Comorbidities of Interest among Home-Dwelling Older and Very Old Adults: A systematic review”. I appreciate the authors’ willingness to put in the effort necessary for such a review, and I recognize the value of systematically exploring work in this area. I am particularly intrigued by the review of research internationally and in multiple languages. I have not reviewed a protocol before, so my comments will largely reflect my knowledge of the area rather than the methodology. My main questions involve the inclusion of RCTs in a review of epidemiological research and some thoughts about the definitions being used for inclusion and exclusion from the review. My specific comments are arranged by section below. Title and Abstract: I was a little confused by the inclusion of the term “very old adults” as I typically think of this to mean those 85+ as the so-called “oldest old”. At-risk drinking is pretty rare in people that old, and I think that for parsimony, you could just say “older adults”. In the USA, The term “community dwelling” is typically used, rather than “home dwelling” but I think either is fine. My main concern is making sure that you are clear about what studies are excluded (e.g. those in skilled nursing facilities are excluded). Introduction: On page 5 of the of the text, the authors talk about at-risk, moderate, and heavy drinking as being a replacement for DSM-

	based diagnosis. I would be wary about that because DSM is not a consumption-based measure, and someone can be an at-risk drinker and endorse zero criteria for an alcohol use disorder. At-risk or “unhealthy” drinking is a different measure that connotes increased risk, but not necessarily problem use or formal AUD diagnosis. On page 6, the authors discuss drinking guidelines derived from the NIAAA in the USA. They discuss standard drink types for different beverages, but I think that it would be useful to convert those to pure alcohol equivalents in imperial (0.6 fluid ounces) and metric (~17 grams). Methods: I am not admittedly not well-versed in systematic reviews, but I wonder about the inclusion of RCTs and other trials in a systematic review of the epidemiology of alcohol use. RCTs are by nature focused on intervention development so my concern is that they don’t say anything about how common risk drinking is and what comorbid conditions exist. If there are RCTs of interventions for risk-drinking, then they may involve 100% of individuals who drink above NIAAA guidelines and people with certain comorbidities may get excluded from the study. It is possible that people in these studies have comorbid conditions that can be systematically reviewed by the authors, but it becomes harder to say whether they are more or less likely than non-risk drinkers to have these problems. Rather than selecting studies based on the mean age of participants, I would suggest a minimum cutoff. The problem is that a study could have an average age of 55, but a lower bound of 35. I am not sure of the inclusion of terms related to “hospital” and other forms of care. My concern here is that this doesn’t necessarily deal with home dwelling older adults. Hospitalized older adult samples may show higher prevalence (i.e. admitted for alcohol-related diagnoses) or lower prevalence (e.g. too ill to drink compared with healthier older adults). I would add “instrument” to the list of terms related to the identifying of measurement of harm among older adults. I appreciate the use of measures to assess bias, but I wonder about their applicability for studies of epidemiology. Because this is a review of the epidemiology of at-risk drinking, rather than an intervention per se, things like protocol deviation, outcome data, etc. are not really measured. If the authors are interested in a systematic review of interventions for older adults, I think that they should select one or a number of interventions (such as CBT or MI) and frame the review that way. Thanks again for the opportunity to review this protocol.

REVIEWER	Berta Austin School of Psychology Universidad Complutense de Madrid (Spain)
REVIEW RETURNED	18-Feb-2019

GENERAL COMMENTS	Comment to authors: - The purpose of this study was to investigate the prevalence and factors related to elevated alcohol consumption among older adults above 65 years in China and Norway. This topic is very important as, in recent years, studies and organizations around the world with a variety of viewpoints have demonstrated the importance of mental health in the elderly (Eurostat, 2014; Kessler & Üstün, 2008; the ESEMeD/MHEDEA Investigators et al., 2004; WHO, 2004). - The structure of the article responds to the needs of BMJ Open. - The data presented were obtained more than 10 years ago. - This paper seems like a second part of the previous paper: Li J, Wu B, Selbæk G, Krokstad S, Helvik A-S. Factors associated with consumption of alcohol in older adults - a comparison between two cultures, China and Norway: the CLHLS and the HUNT-study. BMC Geriatr. 2017;17(1):172. doi:10.1186/s12877-017-0562-9. - The introduction makes no real attempt to synthesise the existing literature. There are important studies about excessive alcohol consumption that have not been cited or reviewed (look at the end of these comments for a list of some missing references). - The Chinese Longitudinal Healthy Longevity Survey (CLHLS) used three question about alcohol consumption. The Nord-Trøndelag Health Study (HUNT3 Survey): used only a question about frequency of consumption of alcohol. The definition of high consumption measured by a single question is not clear. The prevalence of elevated drinking among those drinking for the Norwegian is not comparable to the way they have calculated high alcohol consumption among the Chinese sample. Elevated alcohol consumption cannot be evaluated only in terms of frequency, it is necessary to know the type of drink ingested. This limitation has to be pointed out in the discussion - Page. 5. Line 33. Even soMoreover (review the wording). - Page. 13 Line 13: Better: This study examined prevalence and related factors (i.e., socio-demographic status, perceived overall health, and life satisfaction) associated with elevated alcohol consumption among older adults in China and Norway. - Survey methods are barely reported – no response rates are given and there's little sense of how representative of the broader populations in question these samples are. - The number of Chinese older adults and Norwegian older adults who responded drinking was 2758 and 6210, respectively. Similar data were already published in the article of 2017 of these authors (Li et al., 2017): The prevalence of alcohol consumption for the Chinese and Norwegian samples were 19.88% (weighted) and 46.2%, respectively. - In the discussion, the prevalence rates of high alcohol consumption are not compared with other previous studies in other countries. - In the conclusions, the authors say "So that they can have a better knowledge about excessive alcohol consumption to make alcohol policy about health education and health promotion towards to healthy aging". What kind of actions could be recommended to reduce the high consumption of alcohol among the Chinese population? List of some missing references: 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). American Journal of Psychiatry. 2008; 165(suppl 7): 905–913. Blazer DG, Wu L-T. The epidemiology of at-risk and binge drinking among middle-aged and elderly community adults: National Survey on Drug Use and Health. Am J Psychiatry. 2009; 166(10): 237-45. Bosque-Prous, M., Brugal, M.T., Lima, K.C., Villalbí, J.R., Bartroli, M., y Espelt., A. (2017). Hazardous drinking in people aged 50 years or older: a cross-sectional picture of Europe, 2011-2013. International Journal of Geriatric Psychiatry, 32, 817-828. doi: 10.1002/gps.4528. Di Bari M, Silvestrini G, Chiarlone M, De Alfieri V, Patussi M, Timpanelli R, et al. Features of excessive alcohol drinking in older adults distinctively captured by behavioral and biological screening instruments: an epidemiological study. J Clin Epidemiol. 2002; 55(1): 41-7. Grant, B.F., Chou, S.P., Saha, T.D., Pickering, R.P., Kerridfe, B.T., Ruan, W.J., …, Hasin, D.S. (2017). Prevalence of 12-months alcohol use, high-risk drinking, and DSM-IV alcohol use disorder in the United States, 2001-2002 to 2012-2013: Results from the Epidemiologic Survey on Alcohol and Related Conditions (NESARC). JAMA Psychiatry, 74(9), 911-923. doi:10.1001/jamapsychiatry.2017.2161. 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: 84-89. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. Archives of General Psychiatry. 2005; 62: 593–602 Hasin D, Stinson FS, Ogburn E, Grant BF. Prevalence, correlates, disability, and comorbidity of DSM-IV alcohol abuse and dependence in the United States. Archives of General Psychiatry. 2007; 64(suppl 7): 830–842. Muñoz, M., Ausín, B., Santos-Olmo, A.B., Härter, M., Volkert, J., Schulz, H., …, Andreas, S. (2018) Alcohol use, abuse and dependence in an older European population: Results from the MentDis_ICF65+ study. PLoS ONE, 13(4). doi: 10.1371/journal.pone.0196574. The ESEMeD/MHEDEA Investigators. Sampling and methods of the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatrica Scandinavica. 2004; 109(suppl 420): 8–20. Van Montfoort-De Rave, K.F.G., De Weert-Van Oene, G.H., Beurmanjer, H., y Koekkoek, B. (2017). Late-Onset alcohol dependence: patient-reported problems. Addiction Research & Theory, 25(2), 139-145. doi: 10.1080/16066359.2016.1233967. Volkert J, Schulz H, Härter M, Wlodarczyk O, Andreas S. The prevalence of mental disorders in older people in Western countries - a meta-analysis. Ageing Res Rev. 2013; 12(1): 339-35

REVIEWER	Victoria Williamson Kings College London
REVIEW RETURNED	12-Apr-2019

GENERAL COMMENTS	This is an interesting and very worthwhile review on alcohol misuse in older samples. I have a few comments for authors:

	Abstract: "completed by the second semester of 2019". - This is unclear. Please can you provide a date. Also, please can you state this in the methods section too. Introduction: " However, the number of older adults exhibiting at-risk drinking is likely to increase when the age cohort born in the 1950s, with their heavier drinking habits, reaches old age (8, 9). " - Please can authors expand on why 1950's will have heavier drinking? This might come as a bit of a surprise to some readers. "diabetic, hypertensive & depressive." Authors do a nice job of explaining the link between dementia and alcohol and why this is harmful. The same could be done briefly for the other conditions to provide a strong overview of why alcohol is particularly harmful in older samples. Authors could also highlight the reasons why alcohol misuse is often under diagnosed and the need for this study to encourage physicians to screen for alcohol misuse, as per the points raised in the discussion. CARET: Can authors briefly describe the conditions that will/will not be captured using this tool. Will authors state in strengths/limitations what conditions may have been missed as a result? Can authors provide a justification why only alcohol abuse will be examined, not other substances? Methods: Will authors be considering how military service may impact alcohol misuse? Recent meta-analysis found substance/alcohol misuse to be significantly higher in military samples versus older general population. It could be a potential variable to consider if possible. Methods: Will authors be contacting relevant experts in the field to ask for other papers they might know of? Will authors be following PRISMA guidelines? If so please state more explicitly. Discussion: Will it be possible, given the analysis and bias assessment, for authors to make recommendations about which screening tools may be particularly appropriate in certain contexts for clinicians to use in screening for alcohol misuse?

REVIEWER	Anne Wand University of New South Wales Australia
REVIEW RETURNED	14-Apr-2019

GENERAL COMMENTS	This will be an important review in a relatively understudied area of aged care. In general the protocol is well written and clear. There are some points to be clarified however: Abstract- The methods outline search terms but these do not match with the example of the Embase search in Supplement 3. Suppl 3 is not referred to in text and it is not clear why this is shown. If it is an example of search terms used, then there is no mention of alcohol screening tools/measurements or epidemiological terms. Keywords- the key words are very broad and could be refined further. Why is ‘occasionally’ here?

	Limitations- Are the grey literature to be included (which would reduce publication bias)? Papers in Asian languages are not represented. Introduction The first paragraph is over a page long. To improve readability- and group like-concepts together- it could be restructured into 3 paragraphs eg the interaction between age related physiological changes and alcohol; cognitive decline/disorder and alcohol, and the lack of old age-related definitions and limits for alcohol. Methods Data extraction- level of autonomy is more often referred to as level of function- consider replacing/adding this term The measures for assessing bias are well chosen. Will studies be weighted differently according to their methodological quality? Statistical analyses- It is unclear whether the authors plan to conduct a meta-analysis of the results. If not, this should be explained. The data extraction form is very detailed and clear. It will facilitate transparency in reporting the results as well as comparison between author assessments.

REVIEWER	Dr. Nicolas Padilla-Raygoza University of Guanajuato Mexico
REVIEW RETURNED	01-May-2019

GENERAL COMMENTS	The protocol is very good and the anexes have many details. Maybe the authors could to write with more detail the statistical analysis section. It is general. ¿Why include all study designs? Is this introduce bias? I recommend did not include non-randomizaed studies.

REVIEWER	Grace Chan University of Connecticut School of Medicine USA
REVIEW RETURNED	06-May-2019

GENERAL COMMENTS	The authors planned or had just started a systematic review study on the epidemiology of alcohol use among older adults in community. While the study topic is clinically important and highly relevant to public health, and the authors intended to follow appropriate guidelines for such study, the current manuscript does not provide much more information than in their PROSPERO registration. There are many missing details and errors. Here are some examples: 1. The authors intended to include a wide range of different study designs in their review, but they had not clearly explained how to account for such heterogeneity in their data analysis plan. In fact, the current “Statistical analyses” section did not provide any details on how extracted data will be analyzed. 2. There are likely that multiple publications/articles from any single selected study. Please clarify how these articles would be linked to the same study when counting the number of studies included in this review and when extracting data on study participant characteristics, alcohol use, and comorbidities. 3. Please explain your plan when interested measures were available at multiple time points within any selected study. 4. There is no clear definition for “older adults” and “very old adults”.

	5. Several references were listed multiple times with different reference numbers. Also check that all references are correct and complete. 6. The word protocol should be in the title. The current title seems to suggest that this article reports the completed review.

VERSION 1 – AUTHOR RESPONSE

Point raised by referee (please summarize)	Response by authors (briefly explain)
- The introduction makes no real attempt to synthesise the existing literature. There are important studies about excessive alcohol consumption that have not been cited or reviewed (look at the end of these comments for a list of some missing references).	We agree with the reviewer and reinforced the introduction with additional sentences and supplementary references.
- The Chinese Longitudinal Healthy Longevity Survey (CLHLS) used three questions about alcohol consumption. The Nord-Trøndelag Health Study (HUNT3 Survey): used only a question about frequency of consumption of alcohol. The definition of high consumption measured by a single question is not clear. The prevalence of elevated drinking among those drinking for the Norwegian is not comparable to the way they have calculated high alcohol consumption among the Chinese sample. Elevated alcohol consumption cannot be evaluated only in terms of frequency, it is necessary to know the type of drink ingested. This limitation has to be pointed out in the discussion.	We thank the reviewer for this pertinent information. We will include this in the operationalisation of the protocol. We mentioned a sentence in the discussion section.

REVIEWER 1 EVALUATION: The purpose of this study was to investigate the prevalence and factors related to elevated alcohol consumption among older adults above 65 years in China and Norway. This topic is very important as, in recent years, studies and organizations around the world with a variety of viewpoints have demonstrated the importance of mental health in the elderly (Eurostat, 2014; Kessler & Üstün, 2008; the ESEMeD/MHEDEA Investigators et al., 2004; WHO, 2004).

- The structure of the article responds to the needs of BMJ Open.
- The data presented were obtained more than 10 years ago.
- This paper seems like a second part of the previous paper: Li J, Wu B, Selbæk G, Krokstad S, Helvik A-S. Factors associated with consumption of alcohol in older adults - a comparison between two cultures, China and Norway: the CLHLS and the HUNT-study. BMC Geriatr. 2017;17(1):172. doi:10.1186/s12877-017-0562-9.

- Page. 5. Line 33. Even soMoreover (review the wording).	OK, we revised the wording
- Page. 13 Line 13: Better: This study examined prevalence and related factors (i.e., socio-demographic status, perceived overall health, and life satisfaction) associated with elevated alcohol consumption among older adults in China and Norway.	We don't understand this comment, please explain what is expected to change (page 13 are the references)
- Survey methods are barely reported – no response rates are given and there's little sense of how representative of the broader populations in question these samples are.	We don't' understand this comment, please explain
- The number of Chinese older adults and Norwegian older adults who responded drinking was 2758 and 6210, respectively. Similar data were already published in the article of 2017 of these authors (Li et al., 2017): The	We don't understand this comment, please explain

prevalence of alcohol consumption for the Chinese and Norwegian samples were 19.88% (weighted) and 46.2%, respectively.	
- In the discussion, the prevalence rates of high alcohol consumption are not compared with other previous studies in other countries.	If possible, the comparison will be done after the systematic review
- In the conclusions, the authors say “So that they can have a better knowledge of excessive alcohol consumption to make alcohol policy about health education and health promotion towards healthy aging”. What kind of actions could be recommended to reduce the high consumption of alcohol among the Chinese population?	Will be done after the systematic review

Reviewer: 1

I have not reviewed a protocol before, so my comments will largely reflect my knowledge of the area rather than the methodology. My main questions involve the inclusion of RCTs in a review of epidemiological research and some thoughts about the definitions being used for inclusion and exclusion from the review. My specific comments are arranged by section below.

Title and Abstract: I was a little confused by the inclusion of the term “very old adults” as I typically think of this to mean those 85+ as the so-called oldest old. At-risk drinking is pretty rare in people that old, and I think that for parsimony, you could just say “older adults”. In the USA, The term “community dwelling” is typically used, rather than “home dwelling” but I think either is fine. My main concern is making sure that you are clear about what studies are excluded (e.g. those in skilled nursing facilities are excluded).	OK, we adopted the title of community dwelling older adults
Introduction: On page 5 of the text, the authors talk about at-risk, moderate, and heavy drinking as being a replacement for DSM-based diagnosis. I would be wary about that because DSM is not a consumption-based measure, and someone can be an at-risk drinker and endorse zero criteria for alcohol use disorder. Atrisk or “unhealthy” drinking is a different measure that connotes increased risk, but not necessarily problem use or formal AUD diagnosis. On page 6, the authors discuss drinking guidelines derived from the NIAAA in the USA. They discuss standard drink types for different beverages, but I think that it would be useful to convert those pure alcohol equivalents in imperial (0.6 fluid ounces) and metric (~17 grams).	OK, we added the pure alcohol equivalents in the background

Methods: I am not admittedly not well-versed in systematic reviews, but I wonder about the inclusion of RCTs and other trials in a systematic review of the epidemiology of alcohol use. RCTs are by nature focused on intervention development so my concern is that they don't say anything about how common risk drinking is and what comorbid conditions exist. If there are RCTs of interventions for riskdrinking, then they may involve 100% of individuals who drink above NIAAA	We agree with the reviewer that we should not only focus on RCT. That is the reason why we added non-randomised studies in the systematic review.
guidelines and people with certain comorbidities may get excluded from the study. It is possible that people in these studies have comorbid conditions that can be systematically reviewed by the authors, but it becomes harder to say whether they are more or less likely than non-risk drinkers to have these problems.	
Rather than selecting studies based on the mean age of participants, I would suggest minimum cutoffs. The problem is that a study could have an average age of 55, but a lower bound of 35.	OK, we Adopted our type of Participants Criteria
I am not sure of the inclusion of terms related to "hospital" and other forms of care. My concern here is that this doesn't necessarily deal with home dwelling older adults. Hospitalized older adult samples may show higher prevalence (i.e. admitted for alcohol-related diagnoses) or lower prevalence (e.g. too ill to drink compared with healthier older adults).	We thank the reviewer for this interesting comment. However, in some countries, hospital settings are offering OPD follow up for at risk drinking older adults. With the concern not to miss some interesting publications, we included the term, but we will be very attending full not to consider older inpatients.
I would add "instrument" to the list of terms related to the identifying of measurement of harm among older adults.	OK, we added instrument
I appreciate the use of measures to assess bias, but I wonder about their applicability for studies of epidemiology. Because this is a review of the epidemiology of at-risk drinking, rather than an intervention per se, things like protocol deviation, outcome data, etc. are not really measured. If the authors are interested in a systematic review of interventions for older adults, I think that they should select one or a number of interventions (such as CBT or MI) and frame the review that way.	We thank the reviewer for his excellent advice. We will consider the statements in a further stage of our research program of alcohol addiction.

Reviewer: 2
Reviewer Name: Victoria Williamson
Institutions and Country: King's College London Please state any competing interests or state 'None declared': None . Please leave your comments for the authors below
this is an interesting and very worthwhile review on alcohol misuse in older samples. I have a few comments for authors:

Abstract: "completed by the second semester of 2019". - This is unclear. Please can you provide a date. Also, please can you state this in the methods section too.	OK, we included a date of completion of the review.

Introduction: " However, the number of older adults exhibiting at-risk drinking is likely to increase when the age cohort born in the 1950s, with their heavier drinking habits, reaches old age (8, 9). " - Please can authors expand on why 1950's will have heavier drinking? This might come as a bit of a surprise to some readers.	The idea is to highlight the increase in the number of heavy drinkers and the social changes concerning the use of drugs and alcohol in the age cohort born after 1950, also known as “baby boomers”. The socio demographic and political changes during this time, especially in western civilizations, had a great impact in the way people used and abused of psychotropic substances.
"diabetic, hypertensive & depressive." Authors do a nice job of explaining the link between dementia and alcohol and why this is harmful. The same could be done briefly for the other conditions to provide a strong overview of why alcohol is particularly harmful in older samples. Authors could also highlight the reasons why alcohol misuse is often under diagnosed and the need for this study to encourage physicians to screen for alcohol misuse, as per the points raised in the discussion.	Ok, we added a brief explanation of the link between alcohol use and diabetes, hypertension and depression
CARET: Can authors briefly describe the conditions that will/will not be captured using this tool. Will authors state in strengths/limitations what conditions may have been missed as a result?	Ok, we added the statement in the strength and limitation section.
Can authors provide a justification why only alcohol abuse will be examined, not other substances?	We added following sentence: This choice came from our clinical experience. The
	two substances that our patients principally abuse off are prescription drugs (morphine derivates and benzodiazepines) and alcohol. We made a choice to examine alcohol consumption after realizing that a review of international literature wasn’t available although the awareness of this problem is getting higher among general population and health professionals.
Methods: Will authors be considering how military service may impact alcohol misuse? Recent meta-analysis found substance/alcohol misuse to be significantly higher in military samples versus older general population. It could be a potential variable to consider if possible.	OK, we will include military service. However, we think that only a small population sample of community dwelling older adults are still military.
Methods: Authors are contacting relevant experts in the field to ask for other papers they might know of? Will authors be following PRISMA guidelines? If so please state more explicitly.	This systematic review will be conducted on the scientific databases and grey literature. However, the authors will be in direct contact with field researchers of the CoLaus, experts in the follow-up to the community dwelling older adults.
Discussion: Will it be possible, given the analysis and bias assessment, for authors to make recommendations about which screening tools may be particularly appropriate in certain contexts for clinicians to use in screening for alcohol misuse?	We consider the comments as very interesting and will include this in the protocol.

Reviewer: 3
Reviewer Name: Anne Wand
Institutions and Country: University of New South Wales Australia Please state any competing interests or state, 'None declared': None declared. Please leave your comments for the authors below: This will be an important review in a relatively understudied area of aged care. In general the protocol is well written and clear. There are some points to be clarified, however:

Abstract- The methods outline search terms but these do not match with the example of the Embase search for Supplement 3. Suppl 3 is not referred to in the text and it is not clear why this is shown. If it is an example of search terms used, then there is no mention of alcohol screening tools/measurements or epidemiological terms.	OK, we adapted the EMBASE search strategy and included screening tools / instrument measurements. We added the Suppl 3 (in the manuscript and we completed with an example of EMBASE.com and Medline OVID SP equations.
Keywords- the key words are very broad and could be refined further.	OK, we will consider this after the search strategy
Why is 'occasionally' here? Limitations- Are the grey literature to be included (which would reduce publication bias)? Papers in Asian languages are not represented.	We thank the reviewer for his very relevant comment. We deleted the term. We added grey literature We added Chinese and we will use Google translator or official translate service.
Introduction The first paragraph is over a page long. To improve readability- and groups like concepts together- it could be restructured into 3 paragraphs eg the interaction between age related physiological changes and alcohol; cognitive decline/disorder and alcohol, and the lack of old age-related definitions and limits for alcohol.	This comment is relevant and will be integrated in the publication of the results of the systematic review
Methods Data extraction- level of autonomy is more often referred to as the level of function- consider replacing/adding this term. The measures for assessing bias are well chosen. Will studies be weighted differently according to their methodological quality?	We will apply with rigorously the recommendations mentioned in the PRISMA statement, the Cochrane Risk of Bias Tool and the Robins I- tool .
Statistical analyses- It is unclear whether the author's plan to conduct a metaanalysis of the results. If not, this should be explained.	We included following additional information:
	For dichotomous outcomes, average intervention effects will be calculated as relative risks with 95% confidence intervals (CIs) using a random effects model. For continuous data, a random effects model will be used to calculate weighted mean differences with 95% CIs. If required, we will calculate standard deviations from the standard errors or 95% CIs presented in the articles. Heterogeneity will be quantified using the I^2 and chi-squared tests. Funnel plots will be drawn, and Egger tests will be computed to explore the possibility of publication bias. Reasons for heterogeneity in effect estimates will be sought in meta-analyses. To explore the possible determinants of heterogeneity,

	we will conduct subgroup analyses according to selected study characteristics (e.g., participants' ages; country where the study…). Furthermore, sensitivity analyses will be conducted by excluding relatively small studies (with fewer than 20 participants per randomisation group); and (2) restricting the analyses to studies of good quality. Data will be analysed using SPSS software (version 25.0) and Review Manager 5.3.

Reviewer: 4. Reviewer Name: Dr. Nicolas Padilla-Raygoza Institution and Country: University of Guanajuato, Mexico Please state any competing interests or state 'None declared': None declared. Please leave your comments for the authors below. The protocol is very good and the annexes have many details.

Maybe the authors could write with more detail the statistical analysis section. It is general. ¿Why include all study designs? Is this introducing bias? I recommend did not include non-randomized studies.	OK, Already mentioned The comments are very relevant. However, we think that after conducting the systematic review we will be able to evaluate the relevance to include or not non-randomized studies in this review. Excluding them in epidemiological studies from the start of the study could mean a selection bias.

Reviewer: 5
Reviewer Name: Grace Chan, Institution and Country: University of Connecticut School of Medicine, USA Please state any competing interests or state 'None declared': none please leave your comments for the authors below. The authors planned or had just started a systematic review study on the epidemiology of alcohol use among older adults in the community. While the study topic is clinically important and highly relevant to public health, and the authors intended to follow appropriate guidelines for such study, the current manuscript does not provide much more information than in their PROSPERO registration.

The authors intended to include a wide range of different study designs in their review, but they had not clearly explained how to account for such heterogeneity in their data analysis plan. In fact, the current "Statistical analyses" section did not provide any details on how extracted data will be analyzed	OK, already proposed corrections.
There are likely that multiple publications/articles from any single selected study. Please clarify how these articles would be linked to the same study when counting the number of studies included in this review and when extracting data on study participant characteristics, alcohol use, and comorbidities.	We thank the reviewer for this challenge as stated in any systematic review. To encounter this problem, we engaged a very experienced and competent medical

	Liberian of the Medical Library of the University of Lausanne who will analyse and evaluate duplicates of the different type of studies and the monitor studies and the primary and secondary outcomes.
Please explain your plan when interested measures were available at multiple time points within any selected study.	We planned will ask the advice of an experienced epidemiologist.
There is no clear definition for “older adults” and “very old adults”.	OK, we included the UN-WHO definition of older adults.
Several references were listed multiple times with different reference numbers. Also check that all references are correct and complete.	Ok, we will employ a performing data reference manager
The word protocol should be in the title. The current title seems to suggest that this article reports the completed review.	OK, done

1. Riley RD, Higgins JP, Deeks JJ. Interpretation of random effects meta-analyses. BMJ (Clinical research ed). 2011;342:d549.
2. Lau J, Ioannidis J, Terrin N, Schmid C, I. O. The case of the misleading funnel plot. BMJ (Clinical research ed). 2006;333:597-600.
3. Chiolero A, Santschi V, Burnand B, Platt RW, Paradis G. Meta-analyses: with confidence or prediction intervals? European Journal of Epidemiology. 2012;27:823-5.
4. Borenstein M, Hedges LV, Higgins JPT, Rothstein HR. Prediction intervals: Introduction to Meta-Analysis. In: Ltd JWS, editor. Chichester, UK2009. p. 127-33.