## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## **ARTICLE DETAILS**

TITLE (PROVISIONAL)	INCIDENCE OF DEPRESSION, DEPRESSIVE SYMPTOMS AND
	ITS PREDICTIVE FACTORS IN A COMMUNITY-DWELLING
	OLDER ADULTS: A SYSTEMATIC REVIEW AND META-
	ANALYSIS PROTOCOL
AUTHORS	Brasileiro, Lízie Emanuelle Eulálio; de Medeiros Paiva, Aílla Lorenna; Dantas de Medeiros, Maria Yasmin; Jerez-Roig, Javier; de Souza, Dyego

## **VERSION 1 – REVIEW**

REVIEWER	Cermakova, Pavla
	National Institute of Mental Health, Klecany
REVIEW RETURNED	25-Apr-2021
GENERAL COMMENTS	well written protocol
REVIEWER	Agustini, Bruno
	Deakin University, School of Medicine
REVIEW RETURNED	30-Apr-2021
GENERAL COMMENTS	This is a well-designed and much-needed study that aims to address the incidence and prevalence of depression and depressive symptoms in older adults. My comments relate to the definitions and search strategies proposed by the authors. Prevalence and incidence are very distinct measures, that require different study designs (as noted). To address both at the same time and refer to associated or predictive factors is overextending the reach of this study protocol. For this reason, the search strategy presented is very broad and not clearly defined. Furthermore, it leaves out the most common terms that refer to depressive symptoms in this population (i.e. late-life depression/depressive symptoms, subthreshold depression, etc). I would recommend authors to narrow their focus to either prevalence OR incidence of depressive symptoms in this population and to better define their search strategy and hypothetical associated/predictive factors (e.g. how would "dependency levels" be defined?). I would also recommend authors to include a language definition, since "any language" is also very broad and practically unfeasible. In conclusion, this is a very important topic but the search strategy and definitions should be clearer if this is to be published as a study protocol that can be repeated in the future.

## **VERSION 1 – AUTHOR RESPONSE**

Reviewers' comments:

Reviewer #1: Well written protocol

Reviewer #2: This is a well-designed and much-needed study that aims to address the incidence and prevalence of depression and depressive symptoms in older adults.

My comments relate to the definitions and search strategies proposed by the authors. Prevalence and incidence are very distinct measures, that require different study designs (as noted). To address both at the same time and refer to associated or predictive factors is overextending the reach of this study protocol. For this reason, the search strategy presented is very broad and not clearly defined. Furthermore, it leaves out the most common terms that refer to depressive symptoms in this population (i.e. late-life depression/depressive symptoms, subthreshold depression, etc). I would recommend authors to narrow their focus to either prevalence OR incidence of depressive symptoms in this population and to better define their search strategy and hypothetical associated/predictive factors (e.g. how would "dependency levels" be defined?).

Authors' answer: We all appreciate your feedback. The reviewer is right, addressing the points mentioned is crucial for the correct comprehension of the protocol.

Therefore, small changes were made in the title and throughout the text, in order to highlight the entire research for the objectives: To verify the incidence of depression or depressive symptoms, as well as to detect which possible risk factors would be correlated to depression/depressive symptoms. However, we opted for the permanence of the search strategy placed in the initial version of the protocol. We have established the best possible search strategy so that more relevant studies could emerge within the theme, using several combinations of descriptors and key words in the equation. Regarding the use of the associated terms ('prevalence study' OR 'incidence study') in the equation, compared to the search strategy that used only 'incidence study', no considerable difference was observed between the results of the different searches in the quantity of articles per database. Furthermore, despite the possibility of using filters tools in advanced searches in the various databases, the authors have decided not to include in the search strategy step the filters of document types, languages, and types of studies, since the search was intended to be comprehensive. Thus, we have opted to use the first association, anticipating that the differentiation between cross-sectional and longitudinal studies would be left to be done in the peer review phase.

As for the terms used in the search strategy, literature search strategies were developed using medical subject headings (MeSH) and text words related to the population, depressive spectrum, and the type of study. Therefore, we understood that terms such as late-life depression or subthresholds depression are encompassed in the descriptors used.

As for 'dependency level', in fact, as it was written, it denoted an unspecific term. The term 'dependency level' was changed to "functional disability" based on the scientific literature. A paragraph was added about the hypothesized predictive factors in order to highlight these variables. I would also recommend authors to include a language definition, since "any language" is also very broad and practically unfeasible. In conclusion, this is a very important topic but the search strategy and definitions should be clearer if this is to be published as a study protocol that can be repeated in the future

Authors' answer: considering that it could compromise the more global intent of this systematic review protocol, we have decided not to use language filters as an initial strategy. For articles whose languages are not within the team's domain, the first attempt would be to look for translators whose material is reliable. If this is not possible, the selected languages will be English, Spanish, Portuguese, and French, being recognized as a limitation of the systematic review. The authors wish to thank you for the time dedicated to reviewing our manuscript. We believe the new, revised version, is much better. The manuscript has undergone a throughout, detailed review to improve clarity and understandability.