

## 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

<b>TITLE (PROVISIONAL)</b>	Models of suicide in elderly: a protocol for systematic review
<b>AUTHORS</b>	Rostami, Mohammad; Younesi, Seyed Jalal; Mohammadi shahboulaghi, Farahnaz; Malakouti, Seyedkazem; Foroughan, Mahshid

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Raffaella Calati, Psy.D., Ph.D. University of Montpellier INSERM U 1061: Neuropsychiatry: Epidemiological and Clinical Research Department of Emergency Psychiatry and Post Acute Care, Lapeyronie Hospital, Centre Hospitalier Universitaire (CHU) Montpellier, France
<b>REVIEW RETURNED</b>	20-Sep-2017

<b>GENERAL COMMENTS</b>	<p>The present protocol described steps to perform a systematic review aimed at investigating explanatory suicidal models in the elderly. The review could be interesting but the protocol shows some major critical issues: the inclusion and exclusion criteria were not sufficiently defined; previous literature was not sufficiently described.</p> <p>Some suggestions could improve the manuscript.</p> <p>Abstract, introduction: I would avoid “explain explanatory...”. I suggest starting the protocol focusing on suicide instead of aging (too broad). Please, avoid using “committing suicide” and “complete suicide”. The review of the literature in the Introduction is not sufficient. Only as examples, Authors should mention: 1) A systematic review of interventions to prevent suicidal behaviors and reduce suicidal ideation in older people. Okolie C, Dennis M, Simon Thomas E, John A. Int Psychogeriatr. 2017 Aug 2:1-24. 2) Understanding self-harm in older people: a systematic review of qualitative studies. Wand APF, Peisah C, Draper B, Brodaty H. Aging Ment Health. 2017 Mar 22:1-10.</p> <p>Inclusion criteria are not clear because authors distinguished studies from suicide models. To be included, studies should focus on a specific suicide model? Further criteria should be added because the present ones are too broad. To be included, will the model be statistically analyzed? Or, for example, only mentioned in the discussion? Will authors trace further models according to the results they will find? Information sources: PsycINFO should be added among databases.</p>
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	Among key words you included deliberate self-harm. Will you include non-suicidal self-injury? Please, specify this point.
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<b>REVIEWER</b>	Ki Young Jeong Kyung Hee University Hospital, Republic of Korea
<b>REVIEW RETURNED</b>	16-Oct-2017

<b>GENERAL COMMENTS</b>	<p>This study is considered to be a very necessary study to understand the general characteristics of elderly suicide patients, an protocol for interesting research.</p> <p>There are a few things to supplement.</p> <ol style="list-style-type: none"> <li>1. Generally, the characteristics of elderly suicide are well known to be different from other age-population group. Besides-more important, elderly suicide attempters have been recently reported to possess different characteristics according to degree of aging (young old vs old old). I would like to add an explanation as to whether the characteristics of elderly suicide attempters related to this age need not be considered.</li> <li>2. I think you need a more specific description of the participant's profile you want to collect. (eg, SA methods, previous suicide history....etc)</li> <li>3. Authors in this article mentioned all data were collected from subjects with suicidal ideation, committing suicide, and complete suicide. Comment of clear definition for each categories are seemed to be required in method section</li> </ol>
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<b>REVIEWER</b>	Kate Deuter University of South Australia, Australia
<b>REVIEW RETURNED</b>	18-Oct-2017

<b>GENERAL COMMENTS</b>	<p>The authors are to be commended for situating their protocol in a field of research that has a limited number of systematic review studies. The following comments are offered in the spirit of collegiality and mostly relate to variation in the nomenclature used, particularly in the background sections. I offer the following suggestions:</p> <p><b>Page 2:</b></p> <p>Line 13 – change the word ‘explain’ to ‘describe’</p> <p>Line 23 – change the word ‘senile’ to ‘late life’</p> <p>Line 38 – suggest including keyword ‘explanatory models’ instead of just ‘models’</p> <p><b>Page 3:</b></p> <p>Line 17 – I would include ‘bereavement due to loss of spouse and other relatives</p> <p>Line 19 – ‘old’ person – change to ‘older’ person</p> <p>Line 22 – delete ‘committing’ – change to ‘can manifest in suicidal ideation or suicidal behaviours for some elderly people’</p>
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	<p>Line 30 – change ‘senior’ to ‘older’ and consider re-phrasing ‘Given the global growing population’</p> <p>Lines 34 &amp; 35 – re-phrase and remove the terms ‘committing’ and ‘complete’ – replace with ‘suicidal behaviour’ and ‘death resulting from suicide’</p> <p>Line 39 – change ‘old’ people to ‘older’ people</p> <p>Line 39 – remove the word ‘commit’ and replace with most relevant term(s) – attempt suicide and/or die by suicide</p> <p>Line 45 – delete the sentence ‘see why the elderly really commit suicide’ and replace with ‘to understand what factors contribute to suicide in the elderly’</p> <p>Line 52 – change ‘lifetime’ to ‘late life’</p> <p>Line 52 – change to ‘of the experience of aging’</p> <p>Line 53 change ‘lifetime’ to ‘late life’</p> <p><b>Page 4:</b></p> <p>Lines 5, 12, 30, 42 – change ‘senile’ to ‘late life’</p> <p>Lines 18, 24 – change O’riley to O’Riley</p> <p>Line 21 – change ‘Perceiving’ to ‘Perceived’</p> <p><b>Page 5:</b></p> <p>Line 51 – change to ‘preventive implications for suicide in older people’</p> <p><b>Page 6:</b></p> <p>Line 40 - change to ‘the model referred to in this study includes’</p> <p>Line 44 – change to ‘such models can embrace suicidal ideation, suicidal behaviours and death resulting from suicide’</p> <p><b>Page 7</b></p> <p>Line 17 – suggest also including (attempted suicide) and (suicidal ideation)</p> <p>Line 30 – same as above</p> <p>Line 22 – suggest also including (ageing)</p> <p>Line 33 – same as above</p> <p><b>Page 8</b></p> <p>Lines 41-42 – change to ‘suicide steps (ideation, attempted suicide and death resulting from suicide)</p> <p>Line 53- change to ‘suicide in older people’</p> <p><b>Page 10 – Suggest also consulting:</b></p>
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	<p>Wand, A. P. F., Peisah, C., Draper, B., &amp; Brodaty, H. (2017). Understanding self-harm in older people: a systematic review of qualitative studies. <i>Aging &amp; Mental Health</i>, 1-10.</p> <p>Deuter, K., &amp; Procter, N. (2015). Attempted Suicide in Older People: A Review of the Evidence. <i>Suicidologi</i>, 20(3).</p>
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## VERSION 1 – AUTHOR RESPONSE

Reviewers' Comments to Author:

Reviewer: 1

Reviewer Name: Raffaella Calati, Psy.D., Ph.D.

Institution and Country: University of Montpellier, INSERM U 1061: Neuropsychiatry: Epidemiological and Clinical Research, Department of Emergency Psychiatry and Post Acute Care, Lapeyronie Hospital, Centre Hospitalier Universitaire (CHU), Montpellier, France

Competing Interests: None declared

The present protocol described steps to perform a systematic review aimed at investigating explanatory suicidal models in the elderly. The review could be interesting but the protocol shows some major critical issues: the inclusion and exclusion criteria were not sufficiently defined; previous literature was not sufficiently described.

Some suggestions could improve the manuscript.

All Reviewers' recommendations are exactly applied.

Abstract, introduction: I would avoid "explain explanatory...".

I suggest starting the protocol focusing on suicide instead of aging (too broad).

In the introduction section, the elderly section is summarized and the most focus is on suicide.

Please, avoid using "committing suicide" and "complete suicide".

The review of the literature in the Introduction is not sufficient.

Only as examples, Authors should mention:

1) A systematic review of interventions to prevent suicidal behaviors and reduce suicidal ideation in older people.

Okolie C, Dennis M, Simon Thomas E, John A.

Int Psychogeriatr. 2017 Aug 2:1-24.

2) Understanding self-harm in older people: a systematic review of qualitative studies.

Wand APF, Peisah C, Draper B, Brodaty H.

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Inclusion criteria are not clear because authors distinguished studies from suicide models. To be included, studies should focus on a specific suicide model? Further criteria should be added because the present ones are too broad. To be included, will the model be statistically analyzed? Or, for example, only mentioned in the discussion?

Will authors trace further models according to the results they will find?

Information sources: PsycINFO should be added among databases.

Among key words you included deliberate self-harm. Will you include non-suicidal self-injury? Please, specify this point.

Reviewer: 2

Reviewer Name: Ki Young Jeong

Institution and Country: Kyung Hee University Hospital, Republic of Korea

Competing Interests: none declared

This study is considered to be a very necessary study to understand the general characteristics of elderly suicide patients, an protocol for interesting research.

There are a few things to supplement.

1. Generally, the characteristics of elderly suicide are well known to be different from other age-population group. Besides-more important, elderly suicide attempters have been recently reported to possess different characteristics according to degree of aging (young old vs old old). I would like to add an explanation as to whether the characteristics of elderly suicide attempters related to this age need not be considered.

I did not understand this comment exactly. If you explain more, I will welcome this comment.

2. I think you need a more specific description of the participant's profile you want to collect. (eg, SA methods, previous suicide history....etc)

As much as possible, a more detailed description of the participant's profile was added. Many similar articles were reviewed for this issue.

3. Authors in this article mentioned all data were collected from subjects with suicidal ideation, committing suicide, and complete suicide. Comment of clear definition for each categories are seemed to be required in method section.

The terms are defined in the methodology.

Reviewer: 3

Reviewer Name: Kate Deuter

Institution and Country: University of South Australia, Australia

Competing Interests: None declared

Please find attached

since the comments are more relevant to the writing. All comments have been applied.

The authors are to be commended for situating their protocol in a field of research that has a limited number of systematic review studies. The following comments are offered in the spirit of collegiality and mostly relate to variation in the nomenclature used, particularly in the background sections. I offer the following suggestions:

Page 2:

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Deuter, K., & Procter, N. (2015). Attempted Suicide in Older People: A Review of the Evidence. *Suicidologi*, 20(3)

## VERSION 2 – REVIEW

<b>REVIEWER</b>	Raffaella Calati University of Montpellier INSERM U 1061: Neuropsychiatry: Epidemiological and Clinical Research Department of Emergency Psychiatry and Post Acute Care, Lapeyronie Hospital, Centre Hospitalier Universitaire (CHU) Montpellier, France
<b>REVIEW RETURNED</b>	02-Feb-2018

<b>GENERAL COMMENTS</b>	The authors have properly revised the manuscript according to my suggestion. One minor point: Lines 37-47 of the page 7 (Types of Suicide models) should be revised (language).
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<b>REVIEWER</b>	Maria Cabello CIBERSAM, National Health Institute Carlos III, Spain
<b>REVIEW RETURNED</b>	27-Mar-2018

<b>GENERAL COMMENTS</b>	There are some factors that authors should be clarify in the following points  Type of participants: -Justify why the authors use the cut-off point of 60 years old. Are the authors exclude studies that include people younger than 60? What about if studies are focusing in older people but include also people younger than 60 (for example ageing studies)? -Justify briefly why people with cognitive impairments are excluded -Include also studies using national mortality databases where suicide deaths are included (not only clinical records in a hospital)  Types of Suicide models -Justify why interventional studies (i.e. prevention programs) are not included if they can be testing the usefulness of some suicide theory  Search strategies There are suicide specific journals that should be also hand-searched (For example, crisis, Suicide and life threatening behavior...) Specify if there is some limit in the years of publication  Data collection process
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## VERSION 2 – AUTHOR RESPONSE

Reviewers' Comments to Author:

Reviewer: 1

Reviewer Name: Raffaella Calati

Institution and Country: University of Montpellier, INSERM U 1061: Neuropsychiatry: Epidemiological and Clinical Research, Department of Emergency Psychiatry and Post Acute Care, Lapeyronie Hospital, Centre Hospitalier Universitaire (CHU), Montpellier, France

Competing Interests: None declared.

The authors have properly revised the manuscript according to my suggestion.

One minor point: Lines 37-47 of the page 7 (Types of Suicide models) should be revised (language).

Revised, and corrected.

Reviewer: 2

Reviewer Name: Maria Cabello

Institution and Country: CIBERSAM, National Health Institute Carlos III, Spain

Competing Interests: None declare

There are some factors that authors should be clarify in the following points

Type of participants:

-Justify why the authors use the cut-off point of 60 years old. Are the authors exclude studies that include people younger than 60? What about if studies are focusing in older people but include also people younger than 60 (for example ageing studies)?

All studies including 60 years and over individuals will be included, if they were treated as a specific group and the data gathered from them are presented separately.

-Justify briefly why people with cognitive impairments are excluded.

Cognitively impaired individuals are a special group and the findings based on their data are not generalizable.

-Include also studies using national mortality databases where suicide deaths are included (not only clinical records in a hospital)

Added to the text.

#### Types of Suicide models

-Justify why interventional studies (i.e. prevention programs) are not included if they can be testing the usefulness of some suicide theory.

To reply to the respected reviewer's comment, we refer her to the introduction section mentioning that one main reason for focusing on models is the lack of consensus on the factors contributing in late life suicide. However, the body of research on risk factors and process of emerging Suicidal behaviors in older adults does not clearly delineate how preventive interventions should be designed and how they work. According to research literature (Van Orden & Conwell, 2016), we need to focus more on the models which describe the formation of suicidality in the elderly. Focusing on models of suicide increases our understanding of the subject and helps us in finding important areas for future research and therapeutic and preventive interventions.

Kimberly A. Van Orden and Yeates Conwell (2016). Issues in research on aging and suicide. *Aging & Mental Health*. Vol. 20, No. 2, 240-251, <http://dx.doi.org/10.1080/13607863.2015.1065791>

#### Search strategies

There are suicide specific journals that should be also hand-searched (For example, *Crisis*, *Suicide and Life-Threatening Behavior*...)

Added, as suggested.

Specify if there is some limit in the years of publication

Added and highlighted, as recommended.

#### Data collection process

-Please specify the software you will use to collect the data

Added and highlighted.

### VERSION 3 – REVIEW

<b>REVIEWER</b>	Maria Cabello CIBER of Mental Health
<b>REVIEW RETURNED</b>	31-May-2018
<b>GENERAL COMMENTS</b>	Please, it is important authors justify (with some reference or criteria) why they have used the cut-off point of 60 years old to define the target population.

### VERSION 3 – AUTHOR RESPONSE

Reviewer: 2

Reviewer Name: Maria Cabello



Institution: CIBER of Mental Health

Competing Interests: None declared

Please, it is important authors justify (with some reference or criteria) why they have used the cut-off point of 60 years old to define the target population

It is noteworthy that in most studies in the West, 65 years is considered the beginning of senility while we in Iran (developing countries) consider 60 years as the beginning on senility, according to the WHO guidelines. That is why we considered 60 years and older as the target group in the present study. Furthermore, retirement and enjoying the benefits of social security are set for the age of 60

<http://www.who.int/>

[www.who.int/mental\\_health/evidence/atlas/profiles/irn\\_mh\\_profile.pdf?ua=1&ua=1](http://www.who.int/mental_health/evidence/atlas/profiles/irn_mh_profile.pdf?ua=1&ua=1)