

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Suicidal feelings in the twilight of life: A cross-sectional population-based study of 97-year-olds
<b>AUTHORS</b>	Fässberg, Madeleine; Östling, Svante; Börjesson-Hanson, Anne; Skoog, Ingmar; Waern, Margda

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Annette Erlangsen Senior researcher, Mental Health Centre Copenhagen, Denmark  No competing interests.
<b>REVIEW RETURNED</b>	21-Nov-2012

<b>GENERAL COMMENTS</b>	<p>The manuscript examines the prevalence of suicidal feelings, defined as an affirmative answer to questions on passive and active death wishes, in a population of older adults aged 97 years. Also, differences in characteristics between with and without persons suicidal feelings are analysed. It is a well-written manuscript and thorough analyses.</p> <p>Not much is known on suicidal ideation in the very old and as such the manuscript is an original contribution to the existing knowledge. Given, that suicidal ideation is relatively seldom a substantially large population of oldest old is needed in order to assess the prevalence.</p> <p>The study and choice of instruments seems well conducted and thorough. An additional strength of the study is the use of close relatives and verifiers of provided information by subjects as well as the large battery of data collected.</p> <p>One could discuss how well Paykel's definition of 'suicidal feelings' denotes actual suicidal feelings or perhaps rather weariness of life by including thought of 'life is not worth living' or 'death wishes'.</p> <p>Specific comments:</p> <p>ABSTRACT: Main outcome measure: "in accordance with the Paykel questions" implies that the reader is familiar with the Paykel questions. Could you re-phrase it? Perhaps also state the unit that outcomes are measured in.</p> <p>Strength and limitations of the study: "Although this is [add: the] largest population-based study performed in extreme old age."</p> <p>The authors use different wordings to describe the study population of 97-year olds. It would probably be a good idea to introduce a fix term for this population segment. Whether it should be 'extreme old age' or 'extreme late life', 'extremely old persons' is less relevant but</p>
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	<p>it might be helpful just to use one term consistently.</p> <p>Page 5: "All 97-year-olds living in Gothenburg, Sweden, born between July 1, 1901 , and December 31, 1909 were invited..." This sentence makes the reader stumble and wonder. Could it perhaps be changed for "All persons living in Gothenburg, Sweden who reached the age of 97 years during XX through XX were invited..."</p> <p>In terms of ethics, could you reassure the reader that in case where respondents confirmed recent serious suicidal ideations, they would be offered adequate suicide preventive support?</p> <p>The section on measures used as predictors of suicidal ideation is quite long and could perhaps be abbreviated.</p> <p>Page 9: GAD is used as an abbreviation a couple of times before it is spelled out.</p> <p>The finding re. sleep problems is interesting. Could it also be that this might be a symptom of (potentially undiagnosed) depression?</p> <p>The proportion who declined to participate is fairly large (35.1%). Do you have any thoughts regarding how this might impact the findings of the study? Does it seem likely that persons not responding have a higher level of suicidal feelings?</p> <p>The large proportion of persons with passive death wishes might mean that the cases are more representative of persons weary of life rather than actively suicidal. Perhaps it would be good to list this limitation as well.</p>
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<b>REVIEWER</b>	<p>de Souza Minayo, Maria Fundação Oswaldo Cruz, Centro Latino-Americano de Estudos sobre Violência e Saúde</p> <p>I do not have any conflict of interest in the publication of this article.</p>
<b>REVIEW RETURNED</b>	04-Dec-2012

<b>GENERAL COMMENTS</b>	<p>First of all, I'm sorry for my bad English. I think that this article with its very well elaborated framework is relevant and contributes to the understanding of suicide thinking, mainly in the elderly. We did a research in Brazil that shows - in the same way described for the authors of this text - that, frequently, depression is magnified as factor-related to suicide in older people, when indeed, many micro social problems are more important or are in the origin of the state of depression.</p>
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<b>REVIEWER</b>	<p>Carol Podgorski, PhD, MPH, LMFT Associate Professor of Psychiatry University of Rochester Medical Center</p> <p>I have no competing interests or conflicts of interest to declare.</p>
<b>REVIEW RETURNED</b>	18-Dec-2012

<b>THE STUDY</b>	<p>The authors state that a strength of this study is that it included older adults who reside in the community as well as those who live in institutional care settings. This reviewer was confused by the high</p>
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	number of study subjects who reported their health as "good" or "very good" given that those who are in institutional care often have multiple medical diagnoses and co-morbidities. It would be helpful to have a comparison about how perceptions of health in this population compared to the overall population of very old older adults in the country. This would also help this reviewer address whether the patients in this sample are representative.
<b>REPORTING &amp; ETHICS</b>	The consent process may have been in the methods paper cited by the authors as previously published. This reviewer would find a clear description of the consent process helpful. The authors were careful to describe how they addressed potential subjects with dementia. It would be helpful to know how they addressed other issues that may have warranted clinical attention -- i.e., increase in depression as a result of research interview, for example.
<b>GENERAL COMMENTS</b>	This is an excellent paper that addresses an important topic. The findings of this paper help to inform refinements to current depression screening practices -- i.e., that depression screening alone may not capture death ideation in the population of older older adults. The findings regarding pain and sleep are also useful.

### VERSION 1 – AUTHOR RESPONSE

Reviewer I:

1. The Paykel questions are now specified in the abstract as suggested by the reviewer.
2. We now use one term (extreme old age) in order to describe the study population.
3. The description of the study population (page 5) has been rewritten in accordance with the suggestion of the reviewer.
4. A sentence has been added to the ethics description (page 19) regarding the referral procedure for the treatment of persons who reported serious suicidal ideation.
5. The section on measures used as predictors has been shortened.
6. Generalized Anxiety Disorder is now spelled out the first time it appears in the manuscript. The reviewer asks whether sleep problems might be a symptom of potentially undiagnosed depression. Diagnoses in our study are based on symptom algorithms and thus those with sleep problems who fulfil criteria for major or minor depression are identified as such. Therefore, there should be no cases with "undiagnosed" depression.
7. As the reviewer points out, over a third declined participation. It is likely that persons with suicidal feelings might be more likely to decline, which is now mentioned in the discussion section on page 18.
8. The reviewer's comment that few were seriously suicidal is correct. The Paykel questions involve a broader range of phenomena. This is now pointed out in the discussion section (page 18).

REVIEWER II: No specific questions or comments to be addressed.

REVIEWER III:

1. While data of the sort requested would be extremely valuable for comparison, no nationwide population data are available on the topic of perceptions of health in this age group. It must be remembered that this is a survival population and many persons may be comparing their health to that of friends and relatives who passed away before attaining such high age. This might be one explanation for the observation that many related their health as good or very good.

2. Issues that warranted clinical attention are now mentioned in the manuscript (see Reviewer I, point 4 above).