

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	International Study of Definitions of English-Language Terms for Suicidal Behaviors ©: A survey exploring preferred terminology
AUTHORS	Kolves, Kairi; De Leo, Diego; Goodfellow, Benjamin; Silverman, Morton; Berman, Alan; Mann, John; Arensman, Ella; Hawton, Keith; Phillips, M. R.; Vijayakumar, Lakshmi; Andriessen, Karl; Chavez-Hernandez, Ana-Maria; Heisel, Marnin

VERSION 1 – REVIEW

REVIEWER	Barbara D'Avanzo Istituto di Ricerche Farmacologiche Mario Negri IRCCS Milan, Italy
REVIEW RETURNED	18-Oct-2020

GENERAL COMMENTS	<p>This paper deals with the possibility to give a foundation to a shared nomenclature for suicidal behaviour, with attention to integrate countries with different levels of experience in suicide research. It produces several definitions and conceptual distinctions which are extremely useful in research and in clinical work. It is a well written paper with solid background, methodology and lines of interpretation.</p> <p>I have no major comment, but a few points might be useful in front of questions or difficulties the reader might have.</p> <p>Abstract Concerning the methods, it would be more interesting to understand how the survey was conceived (ie, for each definition the four dimensions of outcome, intent, knowledge and agency were tested). Among the limitations, the differential in representation between HICs and LMICs should be included.</p> <p>Introduction It does not flow very well. There is no explicit link between first and second paragraph. I suggest to reorganize the Introduction as follows: have the second paragraph as first, adjusted accordingly; the first as second, also including the third sentence of the third paragraph (“As discussed elsewhere...around the world”), so that the reasoning is like “most research is produced in HICs and terms originate from there, but LMICs have high rates and are starting to produce more and more research”. Then, the first part of the third paragraph and the last paragraph can follow.</p> <p>Methodology It ends with the reference to the paper that presented the questionnaire (Goodfellow et al, 2019). I suggest to add a brief summary of the structure of the questionnaire. The main</p>
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	<p>components (outcome, intent, knowledge, agency) might appear here, instead of being mentioned in the first lines of the Results.</p> <p>Results With reference to Vignette 3, the differences between HICs and LMICs should be underlined. Careful with Vignette 6: there is a mistake: % of LMIC in “undetermined death” and “suicide” are reversed.</p> <p>Discussion – Differences between HICs and LMICs I can see differences in Vignettes 3, 4, 5, 6, 15. Please discuss differences in Vignette 3, where LMICs tend to give more importance to intent, and in Vignette 15. In the Introduction, the authors speak of differences in the production of research. The differences in language and definitions seem to derive from this difference in experience in research. Although the definitions given in the two groups of countries are in general limited, it would be useful to understand what are the authors’ explanation for such differences, besides less “familiarity” with the terms and the constructs at the base of the definitions. This work has a great potential to clarify the relationships among the components of the definitions are based on. In particular, although agency and knowledge have a role, the dominant dimensions are intent and outcome, with suicide being defined as an act followed by death even if the intent was not clear. In this case the idea is that suicide is determined by death accompanied by intent – but no matter if the intent is clearly stated or not. So, the intent can be reasonably inferred by solid elements. Nonetheless, in suicide attempt, clarity of intent is necessary. Can you discuss this in more detail? The paper relies on the work previously made by some of the authors and in particular on the two reviews Goodfellow et al 2018 and 2019. They define the four main components of the concepts included in the array of suicidal behaviour, and underline differences and similarities across definitions. The effort made altogether, besides contributing to a common language in the discipline of suicidal behaviour, surely helps to describe what is meant by suicide, including implicit and contradictory meanings.</p>
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REVIEWER	Thomas Forkmann University of Duisburg-Essen Department of Clinical Psychology Germany
REVIEW RETURNED	06-Nov-2020

GENERAL COMMENTS	<p>Thank you very much for giving me the opportunity to review this manuscript. The authors present results of an online survey on the terminology for suicidal ideation and behavior. Precisely, they presented a collection of different vignettes to expert participants who were asked to choose a term from a list of terms that in their view captures the suicidal behavior / ideation described in the vignette best. This paper addresses an important topic. An internationally accepted nomenclature of terms in suicidology would be very helpful, in order to improve comparison of research results etc. Although the authors should be applauded for their efforts in advancing on this issue, I have some questions and comments that the authors might want to consider when revising their manuscript. I will detail my comments in the following: Abstract</p>
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	<ul style="list-style-type: none"> - I would appreciate if the authors would introduce abbreviations when used first. - The objective appears rather vague to me. From the reading of the manuscript, I think the authors aimed rather at providing a list of consensus terms and explore differences in terminology between HICs and LMICs, or something like this. - The authors state that low participation rate is a limitation to their study. I would recommend to include the empirical participation rate in the methods / participants section of the abstract. <p>Introduction</p> <ul style="list-style-type: none"> - In my view, the introduction is rather short. Although the authors refer to an accompanying methods paper in which some more information on the background, methods, and design of the study is given, in think more details are needed here in order to enable the readers to understand background and motivation for this research, at least at a basic, level without referring to the methods paper. I think especially, more information is needed on reasons for why older initiatives that aimed at providing consensus terms did not succeed. On this background, why is the present initiative more likely to succeed in providing an international accepted nomenclature? Are there any older empirical studies on this issue available? What are the research hypotheses of the authors? Given that differences between ratings from HIC and LMICs are compared in this paper, I would appreciate if a literature-based hypothesis for these analyses would be given. Lastly, a summary of the rational for how the terms investigated in this study were chosen would be beneficial. <p>Methods</p> <ul style="list-style-type: none"> - Some more basic information on study procedure would be helpful or an explicit reference to the published study protocol. - Did participants provide informed consent prior to participation? - Please give information on age, gender, etc. of participants. - At least basic information on materials used and how it was constructed should be given. - More information on the statistical analysis plan is needed. In the present form, it is not clear for the reader that the ORs were calculated to compare HICs and LMICs (the lack of a hypothesis in the introduction adds to this problem). The extent (percentage) of missing data should be reported. Since there was missing data, absolute numbers of ratings for each term should be added to the figures in the results section (in addition to percentages). If I got it right, some countries were represented by more than 1 person and HICs were represented by more countries / participants than LMICs. This might potentially impact on range of possible variances in these two groups, HICs and LMICs. Furthermore, an individual rating might make a larger contribution to the overall percentage of ratings if a group is smaller. Thus, in the LMIC group, individual ratings might have had a greater impact. I was wondering whether the authors contemplated on somehow controlling the results for the different number of participants per country and per group (HIC vs. LMIC)? <p>Results</p> <ul style="list-style-type: none"> - The first paragraph of the results section could be moved to the methods section. - Information on the purpose of the authors to compare HICs and LMICs is mentioned first on page 7. Again, a hypothesis on this issue in the introduction section would be helpful. - It is unclear, whether participants were allowed to rate for only one term per vignette, which would impact on the interpretation of
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	<p>the results. This information could be added to the description of the study procedures.</p> <p>Discussion</p> <ul style="list-style-type: none"> - The discussion section is much longer as compared to the introduction section. The authors state that prior nomenclatures on suicidal ideation and behavior did not reach international consensus. In my view, this aspect should be described in the introduction section in greater detail. - On page 13, the authors conclude that results underline the “appropriateness of research efforts in the definitional domain”. I would appreciate a clearer argumentation for this conclusion together with more information about the authors ideas for future research efforts on this topic. - Page 15: Here, the authors describe their expectations for differences between HICs and LMICs. In my view, this should be detailed in the introduction section. Moreover, I do not understand why differences in health care systems and amount of resources for professionals working in suicidology should lead to the expectation that differences between HICs and LMICs in rating suicide terminology occur. Is their evidence for the assumption that lay persons have different terminologies for suicidal behavior than experts? And if so, why should this have impacted results since the authors did only include experts in their study sample, both from LMICs and HICs? - I miss a discussion and comparison to the literature of the results on differences between HICs and LMICs. Without that it might be difficult for the reader to appreciate the results.
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Comments to the Author

This paper deals with the possibility to give a foundation to a shared nomenclature for suicidal behaviour, with attention to integrate countries with different levels of experience in suicide research. It produces several definitions and conceptual distinctions which are extremely useful in research and in clinical work. It is a well written paper with solid background, methodology and lines of interpretation.

I have no major comment, but a few points might be useful in front of questions or difficulties the reader might have.

Response: Thank you

Abstract

Concerning the methods, it would be more interesting to understand how the survey was conceived (ie, for each definition the four dimensions of outcome, intent, knowledge and agency were tested). Among the limitations, the differential in representation between HICs and LMICs should be included.

Response: Thank you, further information has been added.

Introduction

It does not flow very well. There is no explicit link between first and second paragraph. I suggest to reorganize the Introduction as follows: have the second paragraph as first, adjusted accordingly; the first as second, also including the third sentence of the third paragraph (“As discussed

elsewhere...around the world”), so that the reasoning is like “most research is produced in HICs and terms originate from there, but LMICs have high rates and are starting to produce more and more research”. Then, the first part of the third paragraph and the last paragraph can follow.

Response: Thank you, we have followed your guidance and reorganised the introduction.

Methodology

It ends with the reference to the paper that presented the questionnaire (Goodfellow et al, 2019). I suggest to add a brief summary of the structure of the questionnaire. The main components (outcome, intent, knowledge, agency) might appear here, instead of being mentioned in the first lines of the Results.

Response: Thank you. Considering we did present the questionnaire and its development extensively in our methodology paper in BMJ Open, which is publicly available and due to word limits (3,000 to 4,000 words and we are currently slightly over), we would like to avoid repeating that part. To make the results more reader friendly we have included some details about the questionnaire in there, it does not apply only to the definition of suicide, but also to other definitions, removing those parts would make the results hard to follow. The items are also presented on figures and in the supplementary files.

Results

With reference to Vignette 3, the differences between HICs and LMICs should be underlined.

Response: Thank you for pointing out Vignette 3. There were no significant differences by the main choices – ‘suicide’ (25% vs. 21.6%; OR:1.21; 95%CI:0.48-3.03; p=0.689) and ‘accident’ (15.9% vs. 21.6%; OR:0.69; 95%CI: 0.26-1.81; p=0.442). Nevertheless, there were notable differences by ‘a suicide attempt’ (2.3% vs. 13.5%; p=0.024; missing=1) and ‘self-injurious behaviour’ (11.4% vs. 0; p=0.033) as the main part was to identify the predominant term, we have not highlighted that result.

Careful with Vignette 6: there is a mistake: % of LMIC in “undetermined death” and “suicide” are reversed.

Response: Thank you, we have fixed that mistake.

Discussion – Differences between HICs and LMICs

I can see differences in Vignettes 3, 4, 5, 6, 15. Please discuss differences in Vignette 3, where LMICs tend to give more importance to intent, and in Vignette 15.

Response: We have noted all significant differences in the text, there were no differences between HICs and LMICs for Vignettes 3 and 15 for the most common choices (the only other significant differences – not for the most common choices were noted for Vignette 3 – presented above).

In the Introduction, the authors speak of differences in the production of research. The differences in language and definitions seem to derive from this difference in experience in research. Although the definitions given in the two groups of countries are in general limited, it would be useful to understand what are the authors’ explanation for such differences, besides less “familiarity” with the terms and the constructs at the base of the definitions.

Response: Thank you for this comment. The we have extended our introduction and discussion around the similarities/differences between HICs and LMICs. As our goal here was to highlight and

use agreed-upon terminology, and due to word limits, we are unfortunately unable to further extend this part.

This work has a great potential to clarify the relationships among the components of the definitions are based on. In particular, although agency and knowledge have a role, the dominant dimensions are intent and outcome, with suicide being defined as an act followed by death even if the intent was not clear. In this case the idea is that suicide is determined by death accompanied by intent – but no matter if the intent is clearly stated or not. So, the intent can be reasonably inferred by solid elements. Nonetheless, in suicide attempt, clarity of intent is necessary. Can you discuss this in more detail?

Response: Thank you. Some comments have been added in the discussion on 'suicide attempt.'

The paper relies on the work previously made by some of the authors and in particular on the two reviews Goodfellow et al 2018 and 2019. They define the four main components of the concepts included in the array of suicidal behaviour, and underline differences and similarities across definitions. The effort made altogether, besides contributing to a common language in the discipline of suicidal behaviours, surely helps to describe what is meant by suicide, including implicit and contradictory meanings.

Response: Thank you

Reviewer: 2

Comments to the Author

Thank you very much for giving me the opportunity to review this manuscript. The authors present results of an online survey on the terminology for suicidal ideation and behavior. Precisely, they presented a collection of different vignettes to expert participants who were asked to choose a term from a list of terms that in their view captures the suicidal behavior / ideation described in the vignette best. This paper addresses an important topic. An internationally accepted nomenclature of terms in suicidology would be very helpful, in order to improve comparison of research results etc.

Response: Thank you

Although the authors should be applauded for their efforts in advancing on this issue, I have some questions and comments that the authors might want to consider when revising their manuscript.

I will detail my comments in the following:

Abstract

- I would appreciate if the authors would introduce abbreviations when used first.

Response: Thank you, we have added the full names for abbreviations in the abstract.

- The objective appears rather vague to me. From the reading of the manuscript, I think the authors aimed rather at providing a list of consensus terms and explore differences in terminology between HICs and LMICs, or something like this.

Response: Thank you, we have addressed the topic.

- The authors state that low participation rate is a limitation to their study. I would recommend to include the empirical participation rate in the methods / participants section of the abstract.

Response: Thank you, information has been added.

Introduction

- In my view, the introduction is rather short. Although the authors refer to an accompanying methods paper in which some more information on the background, methods, and design of the study is given, in think more details are needed here in order to enable the readers to understand background and motivation for this research, at least at a basic, level without referring to the methods paper. I think especially, more information is needed on reasons for why older initiatives that aimed at providing consensus terms did not succeed. On this background, why is the present initiative more likely to succeed in providing an international accepted nomenclature? Are there any older empirical studies on this issue available? What are the research hypotheses of the authors? Given that differences between ratings from HIC and LMICs are compared in this paper, I would appreciate if a literature-based hypothesis for these analyses would be given. Lastly, a summary of the rational for how the terms investigated in this study were chosen would be beneficial.

Response: Thank you. We have done major edits to the introduction and added some explanations. As we have now noted, it is hard to propose a hypothesis as there are no previous international (or national) surveys on topic, previous research has been theoretical only without specific considerations about differences between he countries.

Methods

- Some more basic information on study procedure would be helpful or an explicit reference to the published study protocol.

Response: Thank you, we do have an explicit reference to the published protocol – in BMJ Open, we did highlight it further. We would like to avoid repeating those details as our paper is currently over the word limit already (BMJ Open guidelines – word count: 3000-4000 words, we are somewhat over 4,000) and the methodology paper is in the same journal and it has open access.

- Did participants provide informed consent prior to participation?

Response: Thank you, we did add a note to the consenting participants.

- Please give information on age, gender, etc. of participants.

Response: Thank you, unfortunately, we did not collect information regarding age and gender of participants. Indeed, as stated in our methodology companion paper, participants were asked to answer to the questionnaire as representatives of their own country and not on a personal level. Further research should however explore the influence of such individual factors on professionals working in the field of suicide research.

- At least basic information on materials used and how it was constructed should be given.

Response: Basic information has been given, also additional notes are provided throughout the results section, to make it easier for the reader to follow.

- More information on the statistical analysis plan is needed. In the present form, it is not clear for the reader that the ORs were calculated to compare HICs and LMICs (the lack of a hypothesis in the introduction adds to this problem). The extent (percentage) of missing data should be reported. Since there was missing data, absolute numbers of ratings for each term should be added to the figures in the results section (in addition to percentages). If I got it right, some countries were represented by more than 1 person and HICs were represented by more countries / participants than LMICs. This might potentially impact on range of possible variances in these two groups, HICs and LMICs. Furthermore, an individual rating might make a larger contribution to the overall percentage of ratings

if a group is smaller. Thus, in the LMIC group, individual ratings might have had a greater impact. I was wondering whether the authors contemplated on somehow controlling the results for the different number of participants per country and per group (HIC vs. LMIC)?

Response: Thank you, we have added further details to the statistical analysis. Number of missing values in the analysis is presented throughout the results section. We have done additional sensitivity analyses to address the issue of multiple people per country and also the different number of HICs and LMICs, allowing a comparison between 30 LMICs with 33 HICs.

Results

- The first paragraph of the results section could be moved to the methods section.

Response: Thank you, as noted above, we did consider moving that section to the methods, however, similar sections are also provided for other parts, which we find helpful for the reader to follow the results better and removal of it makes the results section rather confusing.

- Information on the purpose of the authors to compare HICs and LMICs is mentioned first on page 7. Again, a hypothesis on this issue in the introduction section would be helpful.

Response: Thank you. We have added further clarity to the introduction. We note that the main reasons to compare are the facts that suicides from LMICs countries account for 75% of all suicides worldwide and there is an increasing volume of English language research papers from LMICs, therefore we should compare the understanding of the terminology. Considering lack of nomenclature based research from LMICs, we do not have a hypothesis per se.

- It is unclear, whether participants were allowed to rate for only one term per vignette, which would impact on the interpretation of the results. This information could be added to the description of the study procedures.

Response: Page 8 has a sentence: 'For each vignette, a list of terms was proposed from which respondents had to choose a single answer.' This is located to the results section so that the reader has this information available before starting to read the results of vignettes.

Discussion

- The discussion section is much longer as compared to the introduction section. The authors state that prior nomenclatures on suicidal ideation and behavior did not reach international consensus. In my view, this aspect should be described in the introduction section in greater detail.

Response: Thank you, we have relocated some text and added more explanations in the introduction.

- On page 13, the authors conclude that results underline the "appropriateness of research efforts in the definitional domain". I would appreciate a clearer argumentation for this conclusion together with more information about the authors ideas for future research efforts on this topic.

Response: Thank you. Some more explanation has been added in text accordingly.

- Page 15: Here, the authors describe their expectations for differences between HICs and LMICs. In my view, this should be detailed in the introduction section. Moreover, I do not understand why differences in health care systems and amount of resources for professionals working in suicidology should lead to the expectation that differences between HICs and LMICs in rating suicide terminology occur. Is their evidence for the assumption that lay persons have different terminologies for

suicidal behavior than experts? And if so, why should this have impacted results since the authors did only include experts in their study sample, both from LMICs and HICs?

Response: Thank you, we have added more explanation. Our analysis did not focus so much on the difference between lay persons and experts as it did on their country of origin and their supposed access to resources, especially local research. As there is no previous theoretical or empirical evidence it is hard to test a hypothesis, therefore we remained exploratory. It appears our results evidenced some differences in English language terminology used, which however did not prevent us from arriving at a level of consensus.

- I miss a discussion and comparison to the literature of the results on differences between HICs and LMICs. Without that it might be difficult for the reader to appreciate the results.

Response: Thank you. Unfortunately, there is lack of such literature, however do hope that the present work lays the path to further research and discussion.

VERSION 2 – REVIEW

REVIEWER	Barbara D'Avanzo Istituto di Ricerche Farmacologiche Mario Negri IRCCS
REVIEW RETURNED	22-Jan-2021

GENERAL COMMENTS	The authors have addressed all the comments I had made in satisfactory way.
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REVIEWER	Prof. Dr. Thomas Forkmann University of Duisburg-Essen, Department of Clinical Psychology, Germany
REVIEW RETURNED	11-Jan-2021

GENERAL COMMENTS	The authors addressed all of my concerns satisfactorily. This paper addresses an important topic and will make an important contribution to the literature.
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VERSION 2 – AUTHOR RESPONSE

Reviewer: 2

Dr. Thomas Forkmann, University of Duisburg Essen Faculty of Educational Sciences

Comments to the Author:

The authors addressed all of my concerns satisfactorily. This paper addresses an important topic and will make an important contribution to the literature.

Response: Thank you

Reviewer: 1

Dr. Barbara D'Avanzo, Istituto di Ricerche Farmacologiche Mario Negri

Comments to the Author:

The authors have addressed all the comments I had made in satisfactory way.