**Author's response to reviews**

**Title:** Competence and attitudes towards patients with suicidal behaviour: A survey of general practitioners, psychiatrists and internists

**Authors:**

Tine K Grimholt (tinegrim@yahoo.no)
Ole R Haavet (o.r.haavet@medisin.uio.no)
Dag Jacobsen (uxdaja@ous-hf.no)
Leiv Sandvik (UXLEDV@ous-hf.no)
Oivind Ekeberg (UXOIEK@ous-hf.no)

**Version:** 3  **Date:** 25 April 2014

**Author's response to reviews:** see over
Dear editor,

Thank you for giving us the opportunity to resubmit our manuscript:
MS: 1381013080109498
Changed title: *Perceived competence and attitudes towards patients with suicidal behaviour: A survey of general practitioners, psychiatrists and internists*

We find that the comments made by the reviewers are highly relevant. We have carefully addressed the comments from the reviewers and given a point-by-point number with a reply and reference to page and line in the revised manuscript. We believe that the changes have improved the manuscript. The professional company Online English has copyedited the manuscript. The new version has been proof read by a fluent English-speaking researcher. We have also revised the manuscript so it conforms to the journal style and included line numbers.

We hereby submit our revised manuscript.

Sincerely,

Tine K Grimholt
Department of Acute Medicine
Oslo University Hospital
Pb. 4950 Nydalen
0424 OSLO
Reviewer's report
Title: Competence and attitudes towards patients with suicidal behaviour: A survey of general practitioners, psychiatrists and internists
Version: 2  Date: 19 March 2014
Reviewer: Ellinor Salander Renberg

Reviewer's report:
Thank you for giving me the opportunity to review this paper dealing with an important research field. Competence and attitudes among physicians are most certainly decisive for the support and treatment given to persons in suicidal crisis. Though interesting, parts of the paper is not fully worked through and some sections are difficult to follow, and there is a need to improve the writing and presentation of the study. Another major concern is the low response rate. Please find my detailed comments and recommendations below.

Major Compulsory Revisions

Comment 1
Abstract: The aim should be rephrased, … to study different physicians´ attitudes towards suicidal behaviour and their perceived competence to care for suicidal patients.

Reply: Changed according to the suggestion from the referee (Page 2, line 11-13)

Comment 2
Background: Last sentence (before research questions) “ … internal medical and psychiatric wards…” should be internal medicine and psychiatry regarding:

Reply: Changed according to the suggestion from the referee (Page 5, line 16-17)

Comment 3
Methods: First Para: Specify the meaning of a “letter of informed consent”. Clarify also the importance of a specific subject heading.

Reply: This sentence has been deleted, as it was just confusing.

Comment 4
Results: A basic drop out analysis should be conducted regarding gender and age distribution in sample and in responding group, respectively.

Reply: Unfortunately we do not have information about the age of the non-responders. This is commented in the discussion section (Page 17 line 22)

Comment 5
Table 1 is difficult to follow, especially the first section regarding response rate. Response rate among GPs is actually 36% and not 30% as indicated in table where relatively percentage is presented instead.

**Reply:** The percentages have now been changed in accordance with the suggestions from the referee.

**Comment 6**
Exact figures already presented in the table should not be repeated in text.

**Reply:** Most overlapping figures in the manuscript and tables have been deleted in accordance with suggestions from the referee. We think, however, that some of the main figures should also be presented in the text in order to get the main points from the text without the figures.

**Comment 7**
Table 2. Again, figures already presented in table should not be presented in text. (Please see the above comment 6)
In table 2, n=287, is presented, which is strange and should be deleted.

**Reply:** Most figures are now deleted. The n=287 in table 2 is deleted.

**Comment 8**
Attitudes, second para: How can the adjusted model show differences between genders since this was adjusted for?

**Reply:** As shown in the attached table (the table has been removed from a preliminary version of the manuscript and described in the text instead) the variables gender, course participation and age were also analysed in a multivariate regression model as described in the statistics section (Page 8 line 19-21). As can be seen from the table below, when attitude were compared and measured with the USP scale, only gender was significantly different. We therefore presented only the table of the model with comparisons between the GPs, psychiatrists and internists (table 3). If this is unclear or you find it necessary to include these results, we can add the table or further results in the text. Further we have clarified this in the text on page 10 line 10-17. Please also see our reply on comment 19.

**Table x Results from linear regression analysis**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Unadjusted</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>95% CI</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>95% CI</td>
</tr>
<tr>
<td>Gender</td>
<td>Males vs. females</td>
<td>-1.9</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td>------</td>
</tr>
<tr>
<td>Course participation</td>
<td>Yes vs. no</td>
<td>2.4</td>
</tr>
<tr>
<td>Age</td>
<td>41-50 vs. &lt; 40</td>
<td>-1.5</td>
</tr>
<tr>
<td>51-60 vs. &lt; 40</td>
<td>-1.4</td>
<td>-3.0 - 0.23</td>
</tr>
<tr>
<td>&gt; 60 vs. &lt; 40</td>
<td>-0.9</td>
<td>-1.8 - 1.01</td>
</tr>
</tbody>
</table>

USP – sum used as dependent variable (11 = absolute positive up to 55 absolute negative)

**Comment 9**
Self-perceived competence ……: Here or in method section it should be described how different diagnosis are combined in the table.

Reply: This is now thoroughly described in the method section (Page 8, line 9-13)

**Comment 10**
Last para: The scale and scoring for interest in training should be described. The next sentences are referring to results from USP which should be presented in a new paragraph. Don’t understand the sentence “The skill level …”.

Reply: The scoring of the scale is now added to the methods section (Page 7, line 17). The sentence “The skill level …”. Has now been deleted and replaced with more clarifying text (Page 12, line 8)

**Comment 11**
Discussion: In my opinion too long, should be shortened.

Reply: The discussion has been shortened and more focused. It has been shortened with 205 words.

**Comment 12**
Clinical interpretations: the reference to “National institute ..” should be clarified and is perhaps to local. Also the reference in Reference list is strange.

Comment 13
Future research, first sentence: “culture in the wards” – what does that mean?

Reply: «Culture» has been changed to «the general attitude”, and the sentence accordingly (Page 19 line 9)

Comment 14
Last sentence (in the future research section) difficult to understand.

Reply: This sentence is deleted as part of shortening the discussion.

Comment 15
Conclusions:, second Para: “They” should be replaced with Physicians.

Reply: “They” is now replaced with Physicians (Page 19 line 22)

Minor Essential Revisions

Comment 16
Titel: Suggestion: Perceived competence and attitudes towards patients with suicidal behaviour: A survey among general practitioners, psychiatrists and internists

Reply: The title is now changed.

Comment 17
Abstract:
Too detailed (and with repeated) information and too many figures are presented. Should be shortened.

Reply: We think that the main findings should be presented in the abstract. Accordingly, some figures have to be presented. We have, however, deleted some of the figures. The abstract has also been slightly shortened. The word count was already in accordance with the upper limit of 350 words. (The present abstract contains 243 words).

Comment 18
Background:
End of second para: Start a new paragraph from the the last sentence “ Physicians … “ and combine with the next paragraph.

Reply: This is now changed.

Comment 19
Second research question: Is this fully investigated and analysed? Only regarding gender there are results presented.
Reply: The second research question (whether these attitudes are related to gender, age, clinical experience with suicide and training in suicidology). The adjusted analyses included these variables, the results are presented in tables 2 and 3. Please also see our reply on comment 8 for further explanations.

Comment 20
Methods: Under “Incurable illness”, the original ATTS reference should be added.

Reply: The reference has now been replaced with the original reference. 
(Renberg ES, Hjelmeland H, Koposov R: Building models for the relationship between attitudes toward suicide and suicidal behavior: based on data from general population surveys in Sweden, Norway, and Russia. Suicide Life Threat Behav 2008, 38: 661-675.)

Comment 21
Under Statistics, SPSS reference is not in Reference list.

Reply: The format of a reference or bibliographic citation of IBM SPSS Statistics is specific to a particular style manual, and guidance on the structure of such references or citations needs to come from the chosen manual. However, in many scientific journals a formal reference or bibliographic citation is not necessary. For example, in popular APA style, SPSS is considered sufficiently well known that only the version or release number is required as we have done in the manuscript. If you wish us to include a citation the bibliography, please let us know.

Comment 22
Results: Self-perceived competence ......, first para: I do not understand the third sentence. Expressions like “same”, “higher” and “similar” are used, without referring to statistical measures. Should be described with other words.

Reply: This is now changed in line with the rewriting of the entire section.

Comment 23
Discussion: First para, line 8: The two sentences about substance misuse should be placed later in the disc part.

Reply: This is one of the most important results, and changing the order of results in the discussion the sentences should fit better (Page 14 line 16-20).

Comment 24
Under competence, line 7: Is it as simple as lack of instruments available for GPs? Should be further discussed. Are there existing reliable instruments that could be recommended? Generally different scales have difficulties in assessing suicide risk

Reply: We agree with the referee on this, and the reflections about the question are probably too complex and should as the referee comments be further discussed.
However, to make the discussion section more focused and shortened, we have removed this subject and focused on the instruments that we have actually used.

Comment 25
Methodological considerations: The section should be shortened with a more clear focus.

Reply: We have deleted some text in this section. We believe that the rest of the discussion of the methodology and the information provided here is important for further research in the field.

Discretionary Revisions:

Comment 26
Background First para: Are there really no recent references regarding negative attitudes and rejection towards suicidal patients?

Reply: The study performed by Wolk-Wasserman in 1985 has unfortunately not to our knowledge been replicated in recent years. The study actually demonstrates how attitudes prevail in a clinical setting and how negative perceptions and feelings influence the behaviour of the studied health care personnel.
We have replaced one reference with a more recent in the introduction regarding rejection:(Wingate LR, Joiner TE, Jr., Walker RL, Rudd MD, Jobes DA: Empirically informed approaches to topics in suicide risk assessment. Behav Sci Law 2004, 22: 651-665.)

Comment 27
Check language and sentences, some of them are not complete.

Reply: The manuscript has been proofed once more for spelling and grammar mistakes.

Comment 28
Methods Ethics, this section could be shortened.

Reply: We have deleted the two last sentences.

Comment 29
Results: Attitudes, third para: Results difficult to follow, consider a Table instead.

Reply: In the preliminary version of the manuscript, we included all the items from the USP scale in a table. However, to limit the number of tables, but still provide more detailed results, we referred to the most interesting findings in the text. It could also be confusing to show a few of all the 11 USP items. Because the questionnaire will be provided as additional material to the paper, we believe that this also could clarify the subject for the readers.
Comment 30
Discussion:
Are the results in total what would be expected (underlying hypotheses)?
Highlight new interesting findings!

Reply: The discussion section has been changed in line with the referee’s comments.

Reviewer’s report
Title: Competence and attitudes towards patients with suicidal behaviour: A survey of general practitioners, psychiatrists and internists
Version: 2
Date: 25 March 2014
Reviewer: Karolina Krysinska

Reviewer’s report:
Thank you for the opportunity to review a manuscript reporting results of a study looking at medical professionals’ attitudes towards suicide in Norway. The topic of the study is important for clinical practice and suicide prevention, and identifying variables affecting these attitudes allows development and provision of tailored professional training and education.
Unfortunately, the manuscript has a number of minor and major limitations making it unsuitable for publication in its current form:

• Major Compulsory Revisions

Comment 31
There is confusion in the text regarding the very subject of medical professionals’ attitudes. The authors mention “suicidal behaviour” (e.g., title, items 9-12 of the study questionnaire), “suicide attempters” (e.g., USP), “suicidal patients” (p. 13), “people with suicidal behaviour” (p. 19) or “suicide” (e.g., three questions from the ATSQ). Could the authors specify the topic of their study and revise introduction and discussion of the results accordingly?
For instance, management of patients after a suicide attempt might require other set of knowledge and skills than “the competence to detect suicidal risk” (p. 15) or general skills for the “assessment and management of suicide risk” (p. 18).

Reply: This is a very important comment that needs to be clarified. The term “suicidal behaviour” refers to suicide, suicide attempt and suicidal thoughts and is the reason why we have used the term “suicidal behaviour” in the title. To specify and make it more interesting and clinically relevant, we have selected and studied more specific subjects in this study. In the questions about perceived competence to treat, commitment, empathy and irritation, we used the term “suicidal behaviour” because it covers all the above-mentioned terms. It was also important to use validated scales from previous research. The USP scale was used to measure perceptions and
feelings towards patients after a suicide attempt. Items from the ATTS were used to measure attitudes to suicide in case of incurable illness. It is only partly correct that management of patients after a suicide attempt require a different set of knowledge and skills than the competence to detect suicidal risk. Assessment of suicidal risk is one of the main tasks to provide appropriate treatment and adequate follow up after a suicide attempt. Since we have asked three groups of physicians, it is implicit (and also described in the background section) that they meet suicidal patients at different stages. In general practice as well as in psychiatry and medical settings, the detection of suicidal risk is important, and this is a part of their self-perceived competence.

To clarify this, we have now changed the first research question and used suicide in case of incurable illness instead of suicidal behaviour (Page 5, line 19). The use of the term suicidal behaviour in the conclusion (page 19) is not changed because it is in line with the title and the main aims.

In the beginning of this paragraph we described that few had participated in courses in assessment and treatment of suicidal patients during the last five years. Further, that many internists found it difficult to talk to patients after a suicide attempt. The sentence in page 16, line 17 “All three professional groups, however, frequently encounter patients with depression, substance misuse and personality disorders, and should have the competence to detect suicidal risk” in the closure of this paragraph was to underline how important it is that all physicians have sufficient competence to detect this in these groups with well known increased suicide risk.

Comment 32
Also, it is not clear how the internists work with patients after a suicide attempt.

Reply: A more detailed description of the internists work with patients after a suicide attempt has now been added to the background section (Page 4 line 24-25 and Page 5 line 1-2)

Comment 33
Could the authors provide
a) a rationale for including the group of internists in the study sample,

Reply: Patients with suicidal behaviour are treated in all parts of the health care system. Regarding internists, we have described their role more detailed in the background section (see also reply 32). Patients with self-poisoning contribute a considerable part of admissions to somatic hospital, and a large part has made suicide attempts. Previous research has found negative attitudes among personnel in medical wards compared with professionals in psychiatric wards. In addition, many patients with medical illness get depressed and sometimes suicidal. It was therefore necessary to include internists in the sample.

The strength by including three groups with the same basic medical education is also relevant for educational purposes, and for mirroring the actual differences between the professionals. Finally, we find that it strengthened the paper to actually study three groups of physicians instead of one.
Comment 34
..criteria for the selection of the “various disorders” in the questionnaire

Reply: The criteria for the selection of various disorders in the questionnaire are that these are common and also easier to refer to and recognize. It is also likely that the three groups of physicians have most experience and/or a relation to the chosen disorders. We have added one sentence to outline this point (Page 17 line 12-14): The disorders were selected because they are common, and all clinical physicians have treated these patients.

Comment 35
reason for including “irritation” as a reaction when working with different groups of patients?

Reply: As described in the background section and based on previous research, unfortunately health care professionals sometimes get irritated and feel anger especially to suicide attempters. Many physicians are reluctant to admit feelings of irritation towards patients, and coping with irrational feelings is a challenge for many physicians. If you find it important to underline this we can add the sentence: “Physicians may experience several irrational feelings towards their patients, and it may be challenging to cope with e.g. feelings of irritation”.

Comment 36
Also, how can the authors be sure that the phrases “incurable illness”, “personal commitment”, and “level of empathy” were understood and interpreted in the same way by study participants representing different medical specialisations?

Reply: This is a very important comment and should be discussed. This is a well-known problem within all research regarding phenomenon and constructions. As for incurable illness we believe that there is a common perception among physicians of what this entails. The results show that the phrases “Personal commitment” and ”level of empathy” align with the different medical specialties and accordingly the most common diseases they treat. We therefore believe that the results reflect a common perception. It is possible to perform reliability analyses on these subscales, but we believe that this will be ahead of the main aims, and that the results underpin this fact without any further comments.
It is always possible to look closer into the understanding of phrases and constructs, and it would be interesting to study this in more detail. The three phrases are commonly used among Norwegian medical professionals and also in the general population. We had no comments from the study group or from the responders that might indicate that there were problems or different understanding of the construct. Due to the limited space, we would prefer not to elaborate more on this in the revised manuscript.

Comment 37
Did all the study participants know the term “suicidology”?
Reply: Based on the fact that all physicians have the same basic educational background in medicine and that the term is commonly used in scientific papers as well as in the media, we believe that this is a well-known term.

Comment 38
How did the inclusion of a number of other psychiatric and somatic diagnoses improve the quality and the practical implications of the reported study?

Reply: Physicians have different attitudes to various diseases, and mental disorders generally have lower status (Album & Westin, 2008). The quality of the study was improved by including a number of other psychiatric and somatic diagnoses because it strengthened and contrasted the results of self-perceived competence and the attitudes in relation to the groups. The previous research on the current topic is very old. Colson, et al. (1986) Underlined the importance of staff members’ perceptions in that some patient groups are difficult to treat. They suggested that this could influence how patients were treated and the treatment process, with implications for progress and prognosis. They also found that patients with suicidal behaviour were most commonly associated with staff members’ perceptions of being difficult to treat. A study by Creed and Pfeffer (1981) the authors found more positive attitudes among doctors towards patients with somatic diagnoses than patients with self-harm. Patients with substance use disorders may be more challenging than patients with more humble symptoms of anxiety and depression. Therefore, we wanted to compare these groups and also some somatic diagnostic groups. It is possible to add one sentence about this: “By including patients with several psychiatric and somatic diagnostic disorders, a broader understanding of physicians’ may be achieved”.

Comment 39
Could the authors provide more background information on the medical professionals attitudes towards suicide and euthanasia in case of an “incurable illness” (p. 4).

Reply: We have now rewritten this paragraph in the end of the background section and described research on this subject extracted from three very important references (Page 5 line 7-13).

Comment 40
Variable “patients’ suicide in own practice” is not presented in study aims (p. 5) or in the study methodology (p. 7).

Reply: The variable is presented in the study aim 2: “Whether these attitudes are related to gender, age, clinical experience with suicide and theoretical training in suicidology”. We have added a description of this variable in the methodology under the section now called “education and experience with suicide”.

11
Comment 41
Could the authors provide more information about the “cross-sectional” methodology of the survey (p. 5)?

Reply: We now have added a more detailed description of the methodology.

Comment 42
Do all the USP items measure the same variable or are there subscales?
How reliable were the scales used in the study?

Reply: The USP scale is a scale consisting of 11 items derivated from a larger questionnaire containing 41 items. The USP scale measures understanding and willingness to care for patients after a suicide attempt. The reliability is described. We have not explored whether other subscales were present, as the aim was to compare with previous and similar research. In the questionnaire there are also three items from the study of Samuelsson et. al (1997). The first two items relate to education and are described in the education section in the methodology chapter. The third item about view of how the mental health services work was not used in this paper. How reliable were the scales used in the study? The Cronbach’s alpha is described in the statistics section (Page 8 line 17).

Comment 44
Could the authors clarify the sentence starting with “Physicians in general practice (GP), psychiatry…”, especially “(…) and even completed suicide” (p. 4)?

Reply: We have now changed the sentence into: “Physicians in general practice (GP), psychiatry and internal medicine treat suicidal patients in different health care settings” (Page 4 line 21-23).

Comment 45
What is the scientific value of reporting results in section “self-perceived competence” (p. 11), especially in sentences starting with “The psychiatrists reported…”, “The competence scores reported by GPs…”, and “All physicians reported…”.

Reply: It is important to use this knowledge in the development of educational initiatives, as part of national plans for training and for later re-evaluation purposes of such training. As an example we can see from the results that all physicians perceive their competence to treat depression and anxiety higher than to treat patients with suicidal behaviour, and it is therefore important for further research to investigate why physicians find it more more difficult to treat patients with suicidal behaviour.

Comment 46
Similarly, the result “The levels of competence and commitment tended to align with the physicians’ area of specialisation” (p. 13) seems very “Common sense”.

12
Reply: We agree with the referee, but our study has actually demonstrated this “common sense” with empirical research. These results are important because all the three groups of physicians meet patients with all the different diagnoses. And especially the GPs treat all these groups of patients and need qualified competence.

Comment 47
Which findings does the sentence “These findings have not to our knowledge been presented before” (p. 13) refer to?

Reply: We have moved the sentence to the beginning of the discussion so it is clear that it refers to the findings related to substance misusers (Page 14 line 11).

Comment 48
What do the authors mean by “patients with other types of co morbidity” (p.19)?

Reply: The sentence has now been changed into: Physicians were least committed to treat substance misuse patients compared with patients with other diagnoses (Page 19 line 22).

Comment 49
A number of references is relatively “old”, eg, Colson et al. (1986) and Creed and Pfeffer (1981), Hawton et al. (1981). Are there more recent studies reporting results of interest for this study?

Reply: We have found no additional recent studies have been done in this field, than the ones referred to in the bibliography. This highlights the importance of this research paper.

- Minor Essential Revisions

Comment 50 Please, correct a number of sentences in the manuscript, including “among them the internists and males were…” (Abstract),

Reply: This has now been changed.

Comment 51
“physicians attribute various status to…” (pp. 3-4), and

Reply: This has now been changed

Comment 52
“The skill level on this issue was the lowest…” (p. 13).

Reply: This sentence has now been deleted and replaced with more clarifying text.

Comment 53
Could the authors explain the values provided in the paragraph starting with
“Items from the USP…” (p. 9)?

**Reply:** We have described the values in the methods section. If requested it is possible to duplicate the values in the results section. (Please also see comment 29)

**Comment 54**
Page 13: please specify: “(...) results from the present study show that physicians report more positive attitudes [in comparison to…], and willingness to help”.

**Reply:** This sentence has now been changed and specified to: In the review by Saunders et al. (2012) attitudes among health care professionals were largely negative, however, compared to these findings results from the present study show that physicians report more positive attitudes and willingness to help suicidal patients. (Page 14, line 20).

**Comment 55**
Please, check publication date of Saunders et al.

**Reply:** This has now been corrected.

**Comment 56**
Was the result “Sixty-one percent of doctors…” found in the current study or in the study of Kovess-Masfety et al. (p. 15)?

**Reply:** The reference has now been moved forward in the text to clarify the confusion.

**Comment 57**
Please, check spelling throughout the text (eg, “physician”, “suicidal”)

**Reply:** The manuscript has been spellchecked once more.

**Comment 58**
Provide full reference for “(2004). National Collaborating Centre for Mental Health…” (p. 20).

**Reply:** This reference is now replaced in line with comment 12.

**Comment 59**
There is repetition in the answer options: “To a rather high degree” twice in item 7 of the questionnaire.

**Reply:** This has now been changed in the questionnaire to “a very high degree”

**Comment 60**
Could the authors check the number of items in point 13 of the questionnaire
(14 items) and in the description of the questionnaire on pp. 5-6 (11 UPS items + 2 “education” items = 13 items)?

**Reply:** We agree that this was confusing, especially since we have not used the third item. Please see our reply on comment 42 for further explanation.

**Comment 61** Please, remove “Note: It is possible…” (p. 5).

**Reply:** The sentence has now been deleted, as the questionnaire is additional material.

**Comment 62** Please, add description: "means" and "SD" to explain the presented values in Table 2.

**Reply:** We have now added Mean and 95 % Confidence Intervals (in line with the guidelines we used “95 % CI” instead of “SD”) in Table 2.

**References**


Renberg ES, Hjelmeland H, Koposov R: *Building models for the relationship between attitudes toward suicide and suicidal behavior: based on data from general population surveys in Sweden, Norway, and Russia.* Suicide Life Threat Behav 2008, **38**: 661-675.
