PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	**Suicide Related Discussions With Depressed Primary Care Patients – Gender and Quality Gaps. A mixed methods analysis.**
AUTHORS	Vannoy, Steven; Robins, Lynne

VERSION 1 - REVIEW

REVIEWER	***Emeritus Professor Robert D Goldney*** Discipline of Psychiatry University of Adelaide
REVIEW RETURNED	15-Jun-2011

THE STUDY	References focus on US studies.....there is a pertinent Finnish as well as UK literature. References need checking for capitals. Reference 13 relates to the elderly...not acknowledged in text. Reference 13 seems incomplete.....and author list does not conform to any refs in Pubmed. Reference 7 doesn't relate to stigma. First 3 references are at least 5 years old and their data even older, and therefore to speak of them illustrating what is happening over the last decades is a little misleading. The text needs careful editing....eg 'the' for 'they' etc.
RESULTS & CONCLUSIONS	The discussion is sparse and barely relates to previous work. It could be expanded....it is important.
GENERAL COMMENTS	Good data, but needs a more international review of the literature and more discussion.

REVIEWER	***Harriet Bickley*** Research Associate Centre for Suicide Prevention Centre for Mental Health and Risk University of Manchester UK
REVIEW RETURNED	11-Jul-2011

THE STUDY	The significance tests are not described in the paper. It is not therefore possible to say whether they are appropriate
REPORTING & ETHICS	The paper does state that the patients gave consent. The paper also states that the authors had permission from the relevant institutional review boards. However, could the authors specify the names of these relevant boards ?
GENERAL COMMENTS	Formatting suggestions for the authors -It might be best to use suicidal ideation throughout the paper, rather than SI, and always use primary care, rather than pc. -In the second paragraph of the introduction, consider using ‘under

	detection and under treatment'. -In the methodology section, consider rewording the phrase 'a battery of questionnaires'. -The reference numbers and Table/Figure numbers in round brackets are not quite consistent. Some are after full stops/periods and commas, some before. This paper aims to determine the frequency of suicide related discussions in routine primary care encounters with depressed patients, whether there are any patient or physician demographic or other predictors of discussion of suicidal ideation, and a discourse analysis of interview style. The study was carried out in a large metropolitan city in the USA. The study makes good use of previously validated scales and questionnaires to provide a structure for comparison with the recorded patient-physician conversations. Despite only a small sample of the patients exhibiting depressive symptoms and suicide ideation, the authors have uncovered some intriguing results. These include a revealing gender bias by primary care physicians; low levels of suicide discussion in patients with depression; and, that discussions are driven by primary care physicians often using language and leading questions encouraging patients to deny experiencing suicide ideation. It is also of note that primary care physicians are conversely more likely to instigate suicide related discussions in patients presenting with low suicidal ideation than with patients presenting with higher suicidal ideation. Whilst the authors state that the study was "very liberal" in its interpretation of depression or suicide discourse, and thus was arguably over-inclusive in its definition, the difference between the high proportion of participants who presented with suicidal ideation compared to the low proportion of suicide related discussions was nonetheless striking. The results are undoubtedly interesting, but whilst the overall patient sample is large, the samples displaying examples of suicide discussion or depressive illness are small. It is not clear if this is due to suicidal outcomes being rare events; to most patients who were at higher risk of suicide being treated by secondary health services rather than primary health services; or to the type of patients who consented to taking part in this study. This study provides a framework to enable repetitions of the study in other areas across the USA and abroad. I think that a larger study, targeting patients who are already known to be suffering from depression, would be worthwhile so that larger numbers of the relevant patients can be studied. A similar discourse analysis approach as used in the present study could be usefully employed. Suggested additions Title and abstract The paper does not explicitly state which state and country the study was carried out in.

	I think it would be worth stating the country and the years of the study in the title and abstract. Whilst the article focus states that the discussions were happening in routine primary care encounters, the abstract does not, so it might be useful to add this into the abstract. Introduction In the introduction it might be useful to provide a suicide rate for the USA and also where suicide comes in a league table of causes of death in the USA. Are any statistics available on the proportion of suicide deaths which were by people who had had recent contact with their primary care physician in the USA? If so, would establish the size of the problem and show what chances there are for intervention by primary care physicians. Unless it is too complex, could the authors provide a brief overview of typical current and former training of primary care physicians in the USA regarding patient suicidal ideation? Methodology Could the authors state the name(s) of the institutional review boards they refer to who provided ethical approvals for the study? Could the authors state how many patients were approached to take part in the study and what proportion did not consent, and how many dropped out of the study before the end? Did any physicians decline taking part in the study? Could the authors state which statistical tests were used to assess whether particular results were statistically significant? Confounders: Did any of the primary care physicians refer the patients on to other health professionals? Was it possible to record whether any of the patients had had contact with secondary mental health services? Were any of the patients receiving any psychotropic medicine or other treatments? Did any of the patients have comorbid conditions and did they have a history of depression? Was there any follow-up on the patients? Is it possible to check whether any of the patients who consented to be in the study attempted or completed suicide? Is it possible to check whether any of the approached patients who did not consent to be in the study completed suicide? Discussion Do we think that the patients and physicians will have altered what and how they talked to each other, knowing that their conversation was being recorded and analysed, and perhaps down-playing the level of suicidal ideation? It is revealing that it is common for primary care physicians to appear to prefer discussing suicide with patients displaying low suicidal ideation than those displaying higher suicidal ideation, almost as if they fear that discussing suicidality might cause vulnerable patients to be at higher risk. Have any other studies identified this as a problem? Is this something that we think services should be encouraged to remedy? Is there much scientific literature

	discussing whether talking about suicide with someone increases their risk of suicide? What do the authors consider are the obstacles/barriers to primary care physicians being more responsive to suicidal ideation in their patients? What do the authors think are the reasons behind patients appearing to be more likely to admit to suicidal ideation when completing a form, eg PHQ9, than when talking to a primary care physician? Do they think the patients are consciously being less candid when they are talking to physicians compared to when they are writing things down, or are the patients responding to loaded, leading questions in a people-pleasing manner, giving the answers they think the physicians want to hear? It would be interesting to see the study repeated with specialist secondary mental health care service personnel eg psychiatrists, psychologists, mental health nurses. If such a study occurs, it would also be worth getting ethical approval to allow the researchers to ask the relevant staff members or check the patient casenotes to assess whether the topic of suicide had been discussed with the patient previously.

VERSION 1 – AUTHOR RESPONSE

Please note, we have attached a copy of the text below as MS Word document in a table with appropriate formatting. It will most likely be much easier to read.

Reviewer: Emeritus Professor Robert D Goldney

1. References focus on US studies.....there is a pertinent Finnish as well as UK literature.
a. We agree with the reviewer that the reference list, particularly in the early introduction was short and focused on U.S. studies. We have expanded the background literature review and added citations, particularly those with an international focus.

Depression treatment in primary care patients is common in the U. S. {Kessler, 2005, Mojtabai 2008; Olfson, 2002; Kessler, 2002; Wang 2006}, Europe {Wittchen 2005, National 2008, King 2008; Rait, 2010; Hämäläinen 2009,}, and world-wide {Üstürn 1995}.

Üstürn, T. B., & Von Korf, M. (1995). Primary mental health services. In T. B. Üstürn & N. Sartorius (Eds.), Mental illness in general health care : An international study. (pp. 347-60). Chichester ; New York: John Wiley and Sons.

Wittchen, H. U., & Jacobi, F. (2005). Size and burden of mental disorders in europe--a critical review and appraisal of 27 studies. European Neuropsychopharmacology : The Journal of the European College of Neuropsychopharmacology, 15(4), 357-76. doi:10.1016/j.euroneuro.2005.04.012

Rait, G., Walters, K., Griffin, M., Buszewicz, M., Petersen, I., & Nazareth, I. (2009). Recent trends in the incidence of recorded depression in primary care. The British Journal of Psychiatry : The Journal of Mental Science, 195(6), 520-4. doi:10.1192/bjp.bp.108.058636

Hämäläinen, J., Isometsä, E., Sihvo, S., Kiviruusu, O., Pirkola, S., & Lönnqvist, J. (2009). Treatment

of major depressive disorder in the finnish general population. Depression and Anxiety, 26(11), 1049-59. doi:10.1002/da.20524

National Collaborating Center for Mental Health. (2008). Depression: Management of depression in primary care and secondary care. London, National Institue for Clinical Excellence.

King, M., Nazareth, I., Levy, G., Walker, C., Morris, R., Weich, S., . . . Torres-Gonzalez, F. (2008). Prevalence of common mental disorders in general practice attendees across europe. Br J Psychiatry, 192(5), 362-7. doi:10.1192/bjp.bp.107.039966

Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., . . . Zaslavsky, A. M. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. The New England Journal of Medicine, 352(24), 2515-23. doi:10.1056/NEJMsa043266

Mojtabai, R., & Olfson, M. (2008). National patterns in antidepressant treatment by psychiatrists and general medical providers: Results from the national comorbidity survey replication. The Journal of Clinical Psychiatry, 69(7), 1064-74.

2. References need checking for capitals.
a. We have checked the references
3. Reference 13 relates to the elderly...not acknowledged in text.
a. We've added additional references that are applicable to the general primary care population

Schulberg, H. C., Lee, P. W., Bruce, M. L., Raue, P. J., Lefever, J. J., Williams, J. W., . . . Nutting, P. A. (2005). Suicidal ideation and risk levels among primary care patients with uncomplicated depression. Annals of Family Medicine, 3(6), 523-8. doi:10.1370/afm.377

Rutz, W., Walinder, J., Eberhard, G., Holmberg, G., von Knorring, A. L., von Knorring, L., . . . Aberg-Wistedt, A. (1989). An educational program on depressive disorders for general practitioners on gotland: Background and evaluation. Acta Psychiatrica Scandinavica, 79(1), 19-26.

Szanto, K., Kalmar, S., Hendin, H., Rihmer, Z., & Mann, J. J. (2007). A suicide prevention program in a region with a very high suicide rate. Arch Gen Psychiatry, 64(8), 914-20. doi:10.1001/archpsyc.64.8.914

Henriksson, S., & Isacsson, G. (2006). Increased antidepressant use and fewer suicides in jämtland county, sweden, after a primary care educational programme on the treatment of depression. Acta Psychiatrica Scandinavica, 114(3), 159-67. doi:10.1111/j.1600-0447.2006.00822.x

4. Reference 13 seems incomplete.....and author list does not conform to any refs in Pubmed.
a. This is an editorial error, the reference in the manuscript was to a "working title" of the paper that was eventually published as:

Vannoy, S. D., Duberstein, P., Cukrowicz, K., Fan, M. Y., & Unützer, J. (2007). The relationship between suicide ideation and late-life depression. The American Journal of Geriatric Psychiatry, 15(12), 1024-1033.

This has been corrected.
5. Reference 7 doesn't relate to stigma.
a. We can see that the structure of the sentence and references in which reference 7 was used could

be confusing. Reference #7 is to the Web-based Injury Statistics Query and Reporting System, which provides data on injuries in the U.S., particularly rates of suicide for the purposes of this article. Reference #7 immediately follows our declaration that there are 30,000 deaths attributed to suicide annually.

We have added a reference to assist the reader in understanding stigma related to suicide in the U.S.

Witte, T. K., Smith, A. R., & Joiner, T. E. (2010). Reason for cautious optimism? Two studies suggesting reduced stigma against suicide. Journal of Clinical Psychology, 66(6), 611-26. doi:10.1002/jclp.20691

6. First 3 references are at least 5 years old and their data even older, and therefore to speak of them illustrating what is happening over the last decades is a little misleading.

a. We understand the reviewer's concern regarding age of the data and how the test is worded "recent decades". Unfortunately we are unable to find any newer citations that look at trends of depression treatment in primary care over recent time. Hence, we are re-wording the sentence to emphasize the high level of need for depression treatment in primary care with out stating that it has increased in the most recent decade.

7. The text needs careful editing....eg 'the' for 'they' etc.

a. We have reviewed the text for these problems and made corrections accordingly.

8. The discussion is sparse and barely relates to previous work. It could be expanded....it is important.

a. In response to other comments, we have expanded the discussion. See other reviewer comments for specifics.

9. Good data, but needs a more international review of the literature and more discussion.

a. As noted elsewhere, we have added references for international studies.

Reviewer: Harriet Bickley

10. The significance tests are not described in the paper. It is not therefore possible to say whether they are appropriate

a. Inferential statistical tests were conducted using univariate logistic regression in Stata version 10. {Stata 2007}

We have added a section to the methods section indicating such.

11. The paper does state that the patients gave consent. The paper also states that the authors had permission from the relevant institutional review boards. However, could the authors specify the names of these relevant boards ?

b. IRB review and approval was given by the University of Washington IRB

We have modified the methods section indicating such.

Formatting suggestions for the authors

12. -It might be best to use suicidal ideation throughout the paper, rather than SI, and always use primary care, rather than pc.

a. We have replaced all usage of the abbreviations SI and PC with Suicide Ideation and Primary Care respectively. We have also removed the only instance of the abbreviation "EF" for "Establishing Focus".

13. -In the second paragraph of the introduction, consider using 'under detection and under treatment'.

a. We agree, the reviewer's suggestion will improve clarity. We have modified the text accordingly.

14. In the methodology section, consider rewording the phrase 'a battery of questionnaires'.

a. We understand the phrase may be unfamiliar with an international readership and have removed

the portion “a battery of” as it does not transform the meaning of the sentence.
c.
15. -The reference numbers and Table/Figure numbers in round brackets are not quite consistent. Some are after full stops/periods and commas, some before.
d. We have reviewed all reference entries, and references to Tables and Figures to insure consistency.
From the PDF
1. The results are undoubtedly interesting, but whilst the overall patient sample is large, the samples displaying examples of suicide discussion or depressive illness are small. It is not clear if this is due to suicidal outcomes being rare events; to most patients who were at higher risk of suicide being treated by secondary health services rather than primary health services; or to the type of patients who consented to taking part in this study.
a. We agree that there are multiple reasons why these discussions are so rare, yet there is no valid reason why physicians who are seeing depressed patients are not talking about suicide, regardless if the patient is also being followed by a specialist. We have expanded the Limitations discussion to address these points and to include the reviewer’s additional potential reasons for why discussions may not have occurred.
Suggested additions
Title and abstract
16. The paper does not explicitly state which state and country the study was carried out in. I think it would be worth stating the country and the years of the study in the title and abstract. Whilst the article focus states that the discussions were happening in routine primary care encounters, the abstract does not, so it might be useful to add this into the abstract.
a. We will suggest the following title of the paper: Suicide Related Discussions With Depressed Primary Care Patients in the U.S. – Gender and Quality Gaps. A mixed methods Analysis.

We have added the years of data collection to the methods and abstract. It feels awkward to have them in what is already a long title. If the editor prefers, we are happy to add them to the title as well.

Introduction
17. In the introduction it might be useful to provide a suicide rate for the USA and also where suicide comes in a league table of causes of death in the USA.
a. In 2007, the most recent year with available data, suicide was the 8th leading cause of death for U.S. males aged > 17, occurring at a rate of 23.3/100k; for females it was the 17th leading cause of death occurring at a rate of 5.75/100k. (WISQUARS, 2011)

18. Are any statistics available on the proportion of suicide deaths which were by people who had had recent contact with their primary care physician in the USA? If so, would establish the size of the problem and show what chances there are for intervention by primary care physicians.
b. U.S. adults are more than twice as likely to have seen a primary care provider (45%) than a mental health specialist (20%) in the month preceding their death. (Luoma, 2002). Frequency of GP visits in the month prior to suicide in Europe are similar (Pearson, 2008; Isometsä 1995)
19. Unless it is too complex, could the authors provide a brief overview of typical current and former training of primary care physicians in the USA regarding patient suicidal ideation?
c. As the reviewer anticipates, the nature of physician education on suicide risk is too complex for this paper. However, we understand the interest in including this information. Hence, we have added a statement indicating that such training is generally limited, but varies a great deal from one training site to another. Physicians who do residency with high risk populations are likely to get more training than those who do not, but there are no standard curriculum or training procedures. In the discussion.
Methodology
20. Could the authors state the name(s) of the institutional review boards they refer to who provided

ethical approvals for the study?
a. Responded to as noted above
21. Could the authors state how many patients were approached to take part in the study and what proportion did not consent, and how many dropped out of the study before the end?
b. We have enhanced the description of the original study methods to address the reviewer's request as thus:

Patient recruitment began approximately 6 months following completion of the Establishing Focus physician training and lasted one year (March 2004 – March 2005). Eligibility criteria included: being 18 years or older, acting as their own legal guardian, having seen the physician at least twice in the previous two years, having no serious cognitive impairment, and fluency in English. Clinic staff advised study coordinators when eligible patients arrived. The majority (71%) of patients approached agreed to participate. Most (98%) participants completed the study questionnaires following the visit.
22. Did any physicians decline taking part in the study?
c. We have enhanced the description of the original study methods to address the reviewer's request:

Between July 2003 and October 2004, we invited all physicians (n= 75) in a convenience sample of twelve community-based primary care clinics serving the Puget Sound region to participate in this study. A total of 59 (79%) physicians consented to participate. Forty-eight physicians participated in all aspects of the study. Thirty-one worked in a university-affiliated primary care network consisting of eight neighborhood clinics. Seventeen physicians worked in a consumer-governed, nonprofit health care system. Due to difficulties in study logistics, we elected not to collect data from one clinic with six consented physicians. Hence, in the final data, 33 participating physicians were affiliated with a university-affiliated primary care network (of these, 31 completed all components of the study - 2 disenrolled); 20 physicians were affiliated with a consumer-governed, nonprofit health care system (of these 17 completed all components of the study - 3 disenrolled).
23. Could the authors state which statistical tests were used to assess whether particular results were statistically significant?
d. This has been added (See above)
24. Confounders: Did any of the primary care physicians refer the patients on to other health professionals? Was it possible to record whether any of the patients had had contact with secondary mental health services? Were any of the patients receiving any psychotropic medicine or other treatments? Did any of the patients have comorbid conditions and did they have a history of depression?
e. We did not analyze the transcripts with intent of documenting referrals to mental health specialty. While it is of some interest, we feel that highlighting such referrals would be distracting from the main concern that physicians are not talking about suicide risk. Any referral to mental health specialty should have been preceded by an assessment of suicide risk and if that was the primary reason for the referral. We have modified the discussion section to emphasize this point.

We are unable to draw from the data whether or not a patient had been seen by a specialist previously.

We do not have access to medication regimens or other medical diagnoses. For many of these patients, it was not mental health that brought them to their visit.
25. Was there any follow-up on the patients? Is it possible to check whether any of the patients who consented to be in the study attempted or completed suicide? Is it possible to check whether any of the approached patients who did not consent to be in the study completed suicide?
f. There was no patient follow up as a part of the study. We have noted this as a limitation.
Discussion
26. Do we think that the patients and physicians will have altered what and how they talked to each other, knowing that their conversation was being recorded and analysed, and perhaps down-playing

the level of suicidal ideation?
a. This is an interesting question that we have not addressed. Hence, we have added a statement to the limitations section indicating that one possible reason for not discussing suicide was an intentional avoidance of discussing a highly personal and stigmatized topic while being recorded.
27. It is revealing that it is common for primary care physicians to appear to prefer discussing suicide with patients displaying low suicidal ideation than those displaying higher suicidal ideation, almost as if they fear that discussing suicidality might cause vulnerable patients to be at higher risk. Have any other studies identified this as a problem? Is this something that we think services should be encouraged to remedy? Is there much scientific literature discussing whether talking about suicide with someone increases their risk of suicide?
a. We did not highlight this aspect initially and appreciate the reviewer addressing it. In deed, of the 8 physician initiated conversations, half were with patients who had denied ideation on the PHQ9 and only 1 scored greater than one.
b. It is not uncommon for primary care physicians to be concerned that talking about suicide could induce suicide ideation {Schulberg, 2004; Stoppe, 1999}. Claims abound regarding the fact that asking about suicide does not increase the risk of suicide related behavior. However, empirical evidences is less common. Recently, Crawford et. al., 2011, found that there was no increase in suicide ideation at follow up with primary care patients screened for suicide. We have added a discussion of this to our limitations section.
28. What do the authors consider are the obstacles/barriers to primary care physicians being more responsive to suicidal ideation in their patients?
a. There is little data regarding barriers to physicians discussing suicide with patients. Feldman et al found that more severe depression symptoms displayed by the patient, being in an academic medical practice, and having personal experience with depression were facilitators of asking about suicide. Stoppe et al (1995) documented fear of inducing suicide ideation and the attitude by the physician that asking was “not necessary”. The later may indicate that physicians may be inferring from other mental health indicators that suicide is not a concern with a given patient.
29. What do the authors think are the reasons behind patients appearing to be more likely to admit to suicidal ideation when completing a form, eg PHQ9, than when talking to a primary care physician? Do they think the patients are consciously being less candid when they are talking to physicians compared to when they are writing things down, or are the patients responding to loaded, leading questions in a people-pleasing manner, giving the answers they think the physicians want to hear?
a. Note, we only have one case in which a patient indicated SI on the PHQ9 but denied when asked by the physician. Hence we hesitate to speculate on any trend of patient’s admitting on the PHQ9 and then denying to their physician. However, the low rate of spontaneous disclosure by patients is concerning.

Aside from the low rate of physician inquiry, It is alarming that so few patients are communicating their suicide ideation to their physicians. It is possible that these individuals are addressing their suicide ideation with a mental health provider and hence don’t think it is necessary or appropriate to discuss with their physician. It may also be that they are not discussing it with any provider.
30. It would be interesting to see the study repeated with specialist secondary mental health care service personnel eg psychiatrists, psychologists, mental health nurses. If such a study occurs, it would also be worth getting ethical approval to allow the researchers to ask the relevant staff members or check the patient casenotes to assess whether the topic of suicide had been discussed with the patient previously.

a. Agreed! However, our focus is to do intervention oriented research to find ways to increase discussion and risk management behaviors.

VERSION 2 - REVIEW

REVIEWER	***Harriet Bickley***

REVIEW RETURNED	09-Aug-2011

GENERAL COMMENTS	The authors have addressed all the key points I made in my original review. I only have some very minor points to add. These revisions/suggestions are so minor that I would not feel the need to review the manuscript again before publication. 1) Title- Consider shortening the title to "Suicide related discussions with depressed primary care patients in the US" and state that it is a 'mixed methods analysis' in the abstract instead. 2) Methods section- Participants and setting – I am not familiar with the term 'convenience sample'. Is there a more widely used term? 3) Typos i) Results section, 6th paragraph delete the comma between 'harm' and 'themselves'. ii) Discussion, 2nd sentence, add a space between 'depressed' and 'primary'. 4) Limitations section, 1st paragraph, consider rephrasing 'being followed' to 'being treated' or 'being seen'. 5) Conclusions section, consider rephrasing last sentence to "at the highest risk of dying from suicide". 6) In the tables consider i) using longhand instead of eg Exp Cond; HMO. ii) using 95% Confidence Intervals instead of Standard Deviations. 7) Figure 3, Physician Responses to Patient Denial of Ideation, Engaging, Point 1, is there a word missing from the end of the first sentence?