Author’s response to reviews


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Author’s response to reviews:

Dear Editor you will find here under the response to the reviewer comments, we have uploaded a clean version of the revised manuscript and a version tracking changes as supplementary material.

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BMC Psychiatry

Reviewer reports:

Eyal Fruchter (Reviewer 1): This is an interesting and important paper, focusing on a specific and small population in a specific location. Its importance stems from its originality and since its findings show a very high rate of young people suicide, it would be even more important if it would try to focus on future solutions and prospective study to escort these preventive steps.
thank you for making us realize this we maybe tried to refrain from conjecture but too much making it a bit dull. We tried to correct this at the end of the discussion which was significantly lengthened.

There are many limitations to the paper, and the main problems would make major revisions necessary.

The introduction should have at least part of description of this specific population and their living style, as well as data on the whole population around it. There is far less importance in the knowledge of the main land France population even if that's indeed this country's main land since it's a totally deferent area and straggles with different aspect.

thank you indeed this requires clarification we added a paragraph briefly describing key aspects.

“The population in French Guiana is very diverse in terms of culture, language, socioeconomic level. Most people live along the coast in one of the 3 main cities Saint Laurent du Maroni, Kourou, and Cayenne. About 20% of the population, mostly Maroons and Amerindians lives along the Maroni and Oyapock rivers bordering Suriname and Brazil, respectively.”

“Hunting, fishing, gathering and slash and burn agriculture are the traditional means of subsistence. Wayàpi and Teko populations have long remained in isolation, with strict regulations for accessing their territories, notably for the protection against “western” communicable diseases. However, for the past 2 decades they have been confronted with accelerated modernization, the consequences of welfare benefits, the environmental, health, and social consequences of illegal gold mining. Although there are primary schools in the remote villages, there are no high schools and the children thus need to go to other towns to continue their education. All these changes have led to psychological suffering in some, notably with addictions and suicidal behavior.”
The discussion part in its current writing is another result part- no actual discussion and thinking about the why and the how to prevent in the future. There are so many questions arising from the results in spite of the small numbers that should be discussed. The only two good paragraphs in the discussion are there for the third and second to the end which try in this direction. As an example- why do we see such a high mortality rate here- where as in most of the world we see a completed suicide in 1:20 attempts? Is that because we get a sever under estimation? Why do we see men and women equality in the attempts and completed un like any other place? Is that typical for the area or do we miss the women due to under representation or cultural aspect?

Etc.

=> we tried to make some comparisons with France to emphasize the difference and we see what you mean we tend to stick to the data and have not ventured very far to explain what is observed. We have emphasized the points made and tried to find some explanations.

“The unusually high lethality rate could raise the question of ascertainment bias and the underestimation of suicide attempts relative to suicides. However, given the size of the villages, underestimation seemed less likely than at the scale of larger territories. Therefore, the high lethality rate, and the lethal methods used in suicide attempts seem more indicative of the acuity of lethal intent in attempted suicides. The balanced sex ratio, which is unusual, could suggest particularities regarding gender relations with particular psychological distress among young women. We did not have any data to further explore this hypothesis but previous studies showed 11% of women experiencing forced first intercourse.[34] The absence of secondary schools, leads to separation between youths and their family as they move to other towns to continue studying. This presumably leads them to grow apart from traditional culture and fuels intergenerational conflicts, situations that may exacerbate psychological suffering when they come back to their village, isolated, torn between traditional and modern cultures in a context where suicide is omnipresent.[35] The regional cell for the well-being of populations of the interior (CeRMEPI), trained local mediators and educators to assist those with mental health problems, and prevent suicide, rapid response psychiatric teams may have an important role to relieve psychological suffering among youths in these areas. The above interventions (CeRMEPI, on site schools, trained educators and mediators, psychiatric teams to implement an emergency medico-psychologic response in less than 24h) may help alleviate psychological
suffering and suicidality. The interviewed persons were favorable to the idea of psychiatric help. However, these interventions should be prospectively evaluated and the present efforts to quantify the problem of suicide should be pursued in order to see if there is any progress following the interventions. A recent parliamentary mission published a report on the subject of suicide in this area.[36] The report detailed 37 propositions to improve well being and reduce suicidality in these territories, notably the presence of a permanent psychiatric facility in Camopi, and emergency medico-psychological task force able to respond within 24h, and the creation of an observatory of suicide, which definitely would be useful to follow future trends.”

For the more minor changes needed-

English is good but could be better and I would recommend a minor revision in this aspect.

=> we have tried to improve some awkward passages.

It is crucial not to mix between an attempt and a completed suicide- not done currently in the abstract.

=>ok we have added the different results in the abstract so that both are individualized.

It would help our understanding as readers, to know what is this psychiatric service and how well is it getting accepted in this area

=> Currently there is only a mobile psychiatric unit that goes every month to the remote centers. It is well accepted. The question of a permanent psychiatric tem on site was asked and relatively well accepted (58%) but it does not exist yet. We have rephrased to make it clearer.

It would help understanding the results if you would describe the population- numbers, average age, how typical is it there to consume alcohol or marihuana? Social - demographic aspects etc.

=> A study among youth in French Guiana (median age 15) showed that 67% had consumed alcohol and 15% had consumed marijuana. Among Amerindian adults a survey asked what
proportion of persons had consumed more than 5 drinks in 5 hours in the past 4 weeks a situation that concerned 45% of men and 13% of women.

There is a problem with 1-7 years gap between the suicide attempt and the interview but that's of course a non-fixable problem in all retrospective research. It would help to know of the questions included - for example for depression where based on Hamilton/Beck or any other excepted tool- currently un clear.

=>psychiatric diagnoses were made by psychiatrists but no psychometric tools or scales were used. “Psychiatric diagnoses were made by psychiatrists from the mobile unit but no psychometric tools were used.”

Since after all we are dealing here with small numbers, there is no need to further discuss one year but to look and the 8 years as a group.

=> we modified and used average annual rates

Abebaw Fekadu, MD, PhD, MRCPsych (Reviewer 2): BPSY-D-17-00575

Thank you for asking me to review this paper. The paper attempts to look at the pattern of completed and attempted suicide among Amerindians in the French Guiana over a period of eight years (2008-2015) using medical records. The authors also explore qualitatively, in a subset of attempters, factors that may have led to the attempts. The paper reports of a comparatively higher rate of suicides among the study population compared to the report from France. The authors also report increase in suicide in the study population in the last three years of the study.

Below are general and specific comments

A. General comments
1. The study confirms the pattern of risk behaviour and risk factors, such as substance abuse, among such populations. Although the study may be relevant for this particular population, I did not find anything unique in the study design or the findings. There is a degree of 'hyperbole' in the report, for example when the authors refer to 'epidemic' of suicide.

=> we have toned it down throughout the text we hope it is more suitable

2. The study is likely to be limited significantly by ascertainment bias given the subject matter of the study and the reliance of the researchers on clinical records.

=> we have added this point in the limitations

3. The report would benefit from English editing.

We have read it carefully and tried to improve this point

B. Specific comments

1. Abstract:

a. Abstract background begins by providing suicide rates among 13-18 year olds. The rationale for this is unclear.

What would be more appropriate, given the study is a general population study, is to provide the rate for the general population, if available. If not, to state so.

=> Now that it is mentioned we agree that the beginning of the abstract is odd. Thank you for pointing it out. We have rephrased the context in which the present study was implemented. “Suicide within the Amerindian community of Camopi in French Guiana has been an increasing problem widely reported in the media leading the French Government to mandate a parliamentary mission to investigate the matter”
The term 'epidemic' is too strong to use. And I have not seen evidence in the report to substantiate the claim. Less strong terms need to be considered. Or the use of the word epidemic needs to be substantiated with the data.

☞ => We have replaced the term epidemic throughout the text. We also added chi square tests for linear trend in the result (significant both for suicide and for suicide attempt)

☞  

b. Provide the exact figure in addition to or instead of the per 100,000 figure. In the context of a small denominator, as seems to be the case here, the per 100,000 figure is likely to be big. It would also help the reader the actual size of the population in the abstract.

☞ => ok we have added the exact numbers and denominator

☞ => we added population size in the abstract

c. The word 'Reiteration' in the abstract is not clear. I presume this refers to repetition of suicide attempts

☞ => Ok we have replaced

d. Conclusion: A concise description of what is unique about this study would be useful. The statement that 'the circumstances associated with suicidality are potential levers of intervention for the Amerindian community' seems not so relevant because no unique circumstances are presented in the abstract (or the main body of the report for that matter).

☞ => ok we have removed that sentence and given the specific differences with what is observed in mainland France.

2. Introduction

a. Introduction

i. Line 30/31: suggest using the word 'under-estimated' for 'under evaluated'
ii. Either here in the introduction, or the methods section, detailed description of the Amerindian population, and why the population was chosen for the study needs to be described.

⇒ the introduction now describes the population more. The population was chosen because it is in French Guiana addiction and suicide among Amerindians in the Camopi trois sauts area is a major topic which led to ministerial visits and parliamentary missions. We hope the logical flow has improved.

3. 'Patients and methods'

a. I recommend using the phrase 'participants and methods' or simply 'methods' instead of 'patients and methods' as a heading for this section.

⇒ ok we did that

b. Line 3/4: the acronym RP is not clear.

⇒ ok we have clarified (Rémi Pacot)

c. Exclusion criteria: how were accidental deaths distinguished from deaths due to suicide?

⇒ accidental deaths were deaths for which the intent of self harm was not known we have specified

d. How were suicide attempters identified? I know medical records were used. But was it that all medical records of the eight years of study assessed? What is the nature of the medical records? Were they electronic, paper or other? Who assessed the medical records? What was the qualification and training of these assessors?

⇒ All the medical records for the study period were consulted by Dr Remi Pacot first author of the present paper. The medical records are made of paper and are kept at the health center. They are filled by the doctor on site and specialist consultants when they come for their mission in Camopi Trois Sauts (i.e. psychiatrists).
e. Questionnaire: It is not clear how the questionnaire was developed. What is the content of the questionnaire? How many interviewers and what qualifications? How was reliability of the questionnaire assessed? This is particularly important if the interviewers were free to "reformulate" the questions.

⇒ The questionnaire was constructed by Rémi Pacot and Paul Brousse. It was mostly based on 3 sources: -Suicide and social environment. Published by the « Congrès de Psychiatrie et de Neurologie de Langue Française (CPNLF) », Philipe Courtet. 2013. ; The verbal autopsy manual (INSERM); and the Guide for the evaluation of suicide risk by the Ontario Hospital Association (OHA) and the Canadian institute for the safety of patients (ICSP). It was a simple tool to collect demographic information, to verify that the person had attempted suicide, to explore the circumstances around the act, and the presence of known risk factors. The main modules were: context; life events during the year before the suicide attempt; substance and or alcohol use; vulnerability factors; relations with the medical psychiatric professionals; traditional and spiritual views. These were closed answers. There was in addition an open question: what words come to your mind when you think about suicide?

It was not a psychometric tool. It was administered by Rémi Pacot who could evaluate the understanding of questions.

⇒ f. Outcome: how was the outcome of suicide and suicide attempt ascertained? For example, was it required that the medical records needed to state explicitly these outcomes?

⇒ => At the health center 2 amerindian nursing assistants from the village know everyone and are precious informants, in addition medical records were consulted, the information system of the health centers, the information system of the emergency medical teams based in Cayenne (SAMU which can send a helicopter to transfer patients), cayenne hospital’s information system (in case patients were transferred in ICU) . we have specified.

g. Page 5, line 5/6: sentence could be clearer if 'it' was substituted for 'and'

⇒ =>ok we modified

h. Authors seem to have interest to look at trend over time. If that is the case, they may consider trend analysis.
4. Result

a. In relation to 2015, it is stated that 296/100,000 deaths had occurred. As indicated in the abstract, it is important to provide the absolute number of deaths. And also the absolute denominator would be helpful.

b. Incidentally, the paper refers to 2015 as 'last year'. Omit the reference for 'last year'.

c. The subheading on age also refers to sex. Consider changing the subtitle. Additionally, percentages may be unintentionally misleading with small denominators. Please provide absolute numbers too.

d. Does the reference to n=55 include suicide completers? In that case, please indicate.

e. 'Reiteration': repetition may be a more appropriate term

f. P6 refers to alcohol dependence. How was this ascertained?

5. Discussion
a. The main limitations are to do with case ascertainment, questionnaire development and administration and outcome ascertainment. I recommend that authors refer to these as limitations.

ائها => ok we have done this.

6. Conclusion

a. Conclusion somewhat reads as a summary of the results. But it should be a reflection of the authors on the most important findings and their implications.

ائها => we have tried to improve the conclusion.

b. The statement that "There are determinants linked to the individual and to culture." This statement may be interpreted in several ways. Please make it clear.

ائها We have expanded a bit.

c. The language in some places is dramatic: "We have thus witnessed a suicide epidemic with increasing suicide rates, reaching striking levels". How was epidemic defined? I suggest using simpler terms indicating increased rates in the population would communicate the message.

ائها => we agree now that you point this to us thank you. We have toned it down.

d. Please make sure to include data based discussion/conclusion points in the results section. For example, the reference to spirits, voices.

ائها => ok We have removed these aspects.

We hope you will find the manuscript has sufficiently improved to warrant publication. We again thank the reviewers for their precious comments which have helped us greatly in this revision.