Author's response to reviews

Title: Study of the Outcome of Suicide Attempts: Characteristics of Hospitalization in a Psychiatric Ward Group, Critical Care Center Group, and Non-hospitalized Group

Authors:

Kaoru Kudo (kudok@iwate-med.ac.jp)
Kotaro Otsuka (kotaro29@df6.so-net.ne.jp)
Jin Endo (aak49040@yahoo.co.jp)
Tomoyuki Yoshida (tomyoshi@iwate-med.ac.jp)
Hisayasu Isono (isono-h@hotmail.co.jp)
Takehito Yambe (ta-yambe@mpd.biglobe.ne.jp)
Hikaru Nakamura (odessa@mub.biglobe.ne.jp)
Sachiyo Kawamura (sakawamu@iwate-med.ac.jp)
Atsuhiko Koeda (mcdaniel.3c.player@hotmail.co.jp)
Junko Yagi (yagij@flamenco.plala.or.jp)
Nobuo Kemuyama (kemu-von-zibu@live.jp)
Hisako Harada (FZH02260@nifty.com)
Fuminori Chida (chida-psy@umin.net)
Shigeatsu Endo (sendo@iwate-med.ac.jp)
Akio Sakai (sakaiaki@iwate-med.ac.jp)

Version: 3 Date: 11 December 2009

Author's response to reviews: see over
Dear Professor Natalie Pafitis,

Thank you for your consideration of reviewing our previously submitted paper entitled “Study of the Outcome of Suicide Attempts and the Potential Needs of the Individuals Involved” (MS 1154127144306881). We have made the amendments as suggested by the reviewers. Each amendment was made in line with each comment given by the reviewers. Title of the article was also changed as suggested by the reviewer.

We really appreciate it if you reconsider our resubmitted paper for publication in your Journal. Thank you very much for your effort in advance.

Very cordially,
Kotaro Otsuka, MD, PhD.
Dept. of Neuropsychiatry,
Iwate Medical University,
19-1 Uchimaru, Morioka
020-8505 Japan

**Revision according to the reviewers**

Thank you very much for useful suggestions for our paper. We revised the previous version along with the reviewers’ comments. First we numbered the points that reviewers indicated, and then we put the revision and answer to each point.

Reviewer(s)' Comments to Author:
Reviewer's comment (Prof. Jeglic, E.L.)

1. First, the title has been modified to “Study of the Outcome of Suicide Attempts: Characteristics of Hospitalization in a Psychiatric Ward Group, Critical Care Center Group, and Non-hospitalized Group.” Second, the purpose in the Abstract was revised to: “Purpose: Following categorization of suicidal attempters who visited the emergency room by outcome, to identify the characteristics and potential needs of each group.” Finally, the end of the last sentence of the “Introduction” was changed from “the potential needs of individuals in each outcome group” to “the potential needs of each outcome group.”

2. We referred to some documents and inserted the following paragraph.

3. We have inserted the following sentences in page 5 of “Subjects and Methods” “It has been pointed out that, in emergency situations, it often becomes difficult to understand or record the clinical information. Since 2000, we have used case cards to record the patient’s demographic information, psychiatric assessment, prognosis, and other treatment information, obtained from the patient, his/her family and the rescue crew, for all patients treated by psychiatric emergency doctors (1,400 cases per year). The 1348 cases assessed in this study were recorded in the same fashion.” The sentences following “for evaluable patients” were removed.

4. We have added P values in the “Results” and changed the expression.

1. Background Factors (Table 1) (Page 6-7)

"The HIPW group (N=486, male: 160) had the highest number of cases, followed by the HICCC (N=475, male: 209) group and the NH group (N=387, male: 48) in this order. There were significant differences in the percentage of males among the three groups (P<0.001), and the percentage of males was highest in the HICCC group. There were significant differences in average age among the three groups (P<0.001), and the percentage was highest in the HICCC group, followed by the HIPW group and the NH group as determined by the Bonferroni test conducted later. There were significant differences in the percentage of first and second visits among the three groups (P<0.001), and the HICCC group exhibited the highest percentage at 64.2%, while both the NH group and HIPW group had about 50%. There were significant differences in the modality of hospital presentation among the three groups (P<0.001), and most of the HICCC group and many of the HIPW group patients were tertiary outpatients. Finally, there were also significant differences in psychiatric consultation history among the three groups (P<0.001): the percentage of subjects with a history of such was higher in the NH and HIPW groups than in the HICCC group."
2. Clinical Rating, Diagnosis, Method of Suicide Attempt, and Regimen (Table 2) "In severity of disturbance of consciousness (JCS) (p<0.0001) and general health performance (GAS average) (p<0.0001), significant differences were recognized among the three groups, with JCS and GAS, highest in the HICCC group, followed by the HIPW group and then the NH group. There were significant differences among the three groups in psychiatric symptoms (total BPRS) (p=0.0001) and life events (average LCU) (p<0.0001). In addition, the score was highest in the HICCC group, followed by the HIPW group and NH group (Bonferroni-test)." There were also significant differences among the three groups in method of psychotherapy, psychotropic agent administration, physical treatment, internal use of psychotropic drugs, and psychotropic drug injection (P<0.001).

3. Logistic Regression Analysis (Table 3) (Page 8-9)

"The odds ratio for the NH group increased 0.987 (P=0.033) with one-year increase in age, as well as 0.979 (P=0.015) in BPRS, 1.010 (P=0.0015) in GAS, and 0.986 (P<0.001) in JCS. The odds ratio for men was 0.311 (P<0.0001) compared to women, that for the delivery of physical treatment compared to absence of it 0.460 (P<0.001), that for the delivery of psychotherapy compared to the absence of it 1.680 (P=0.002), and that for psychotropic agent administration compared to the absence of it 12.17 (P=0.035).

In the HIPW group, the odds ratio was 1.462 (P=0.011) for men compared to women, while that for JCS was 0.997 (P<0.001). The odds ratio for the delivery of suicide-related behavior over a lifetime compared to the absence of it was 0.643 (P=0.020), while by method of attempted suicide it was 0.092 (P<0.001) for drug overdose, 0.203 (P=0.018) for gassing, 0.251 (P=0.045) for jumping, and 0.030 (P=0.004) for burning.

In the HICCC group, the odds ratio was 1.016 (P=0.003) for age, 1.022
(P=0.010) for BPRS, and 1.008 (P<0.001) for JCS. The odds ratio was 1.544 (P=0.011) for men compared to women, that for first visit compared to return visit 1.504 (P=0.014), that for the delivery of physical treatment compared to the absence of it 2.957 (P<0.001), and that for the delivery of psychotherapy compared to the absence of it 0.333 (P<0.001), while by method of attempted suicide it was 21.351 (P=0.007) for overdose, 11.733 (P=0.034) for gassing, 21.671 (P=0.007) for jumping, and 78.022 (P=0.005) for burning."

5. We have added specific names of F3 and F4 in page 6 where they first appeared.

6. We have cited results of the previous studies in considering the logistic analysis and made a comparative review.

7. The sentence in page 8, line 7, was revised as follows: ‘...used to be termed “parasuicides,” [8,9] however, they are termed “deliberate self harm” in the extant literature.’ We have replaced the term “parasuicide,” which appeared in other parts of the paper, with the term “deliberate self harm.”

8. We have rewritten the last paragraph of “Introduction” as follows.

In this study, we categorized suicide attempters treated in the emergency room into three groups - those who were hospitalized in the critical care center, those who were hospitalized in a psychiatry ward (presently closed), and those who were sent home - and examined each group’s characteristics, (i.e., background factors such as sex and age,
psychiatric diagnosis and medical history, and methods of suicide attempt) and the severity and differences among groups. Logistic regression analysis was then performed to examine predictors of each outcome.

9. We have added the following sentence in page 15, after “affects choice of treatment”: “Needless to say, it should be noted that, since the HICCC group was in general severely injured physically with impairment of consciousness, psychiatric treatment was hardly offered to them.” (We have emphasized that the HICCC group’s severe injury and impairment of consciousness resulted in no application of psychiatric treatment. We will not consider whether use of psychiatric treatment in the HICCC group was a factor leading to hospitalization.

10. We have corrected some expressions and had the English text proofread.

11. We have added the following sentence to “Results.” "The HIPW group had the highest number of cases, and their symptoms were psychologically serious but physically mild.”

12. We added the number of subjects and that of males in the beginning part of the “Results.”

13. We have added the following paragraph in “Subjects and Methods” in page 5: “The physical severity of each suicide attempts was assessed using Asukai's Criteria [1]. These criteria adopted for the classification of the absolutely dangerous group (AD group) were as follows: jumping from a height (<10m), jumping in front of a moving train, cutting or stabbing internal organs, hanging, drug overdosing or other poisoning, requiring medical attention (e.g. mechanical respirator, hemodialysis), severe burning, gassing, and drowning. All subjects were divided into two groups: the AD group and the relatively dangerous group (RD group).”

14. We have rewritten the conclusion as follows: “Conclusion: There are
different potential needs for each group. The HICCC group needs psychiatrists on a full-time basis and also social workers and clinical psychotherapists to immediately initiate comprehensive care by a medical team composed of multiple professionals. The HIPW group needs psychological education to prevent repetition of suicide attempts, and high-quality physical treatment and management skill of the staff in the psychiatric ward. The NH group subjects need a support system to convince them of the risks of attempting suicide and to take a problem-solving approach to specific issues.

Reviewer’s comment (Prof. Baca-Garcia, E.)

1. We have examined collinearity and added the following sentences in “4. Multiple Logistic Regression Analysis” in page 14: “Spearman’s correlation coefficients among the three outcome categories as well as items with a large confidence interval, i.e. taking psychotropic drug, poisoning, gassing, jumping and burning, were between -0.200 and 0.041. It thus appeared that there were no marked effects of multicollinearity on those findings with a large confidence interval.”

2. We added the literature referred to by the reviewer to “Considerations” on page 14 as follows: “In a previous study, Gaca-Garcia, E. et al (2004) listed the following as causes for increased odds ratios of hospitalization for suicide attempters who visited the critical care center: intention to repeat the attempt, plan to use a lethal method, low psychosocial functioning before the suicide attempt, previous hospitalization, a suicide attempt within the past year, and planning that nobody would try to save their life after they had attempted suicide. They also listed causes for decreased odds ratios as follows: a realistic perspective on the future after the attempt, relief that the attempt was not effective, availability of a method to kill oneself (that was not used), belief that the attempt would influence others, and family support.”.
Also, the following studies were cited in “Subjects and Methods.”


3. We have rewritten “Considerations,” referring to several studies.

Other Revision

“ICD-10 score” was changed to “ICD-10 diagnosis” in “2. Clinical Rating, Diagnosis, Method of Suicide Attempt, and Regimen (Table 2)” in page 7. Also, “half of all score” was changed to “half of all diagnoses.”