Reviewer's report

Title: Employing crisis postcards with case management in Kaohsiung, Taiwan: 6-month outcomes of a randomised controlled trial for suicide attempters

Version: 5 Date: 2 April 2013

Reviewer: Greg Carter

Reviewer's report:

Thank you for asking me to review this manuscript again.

Major Issues:

I am still unsure about the randomisation – for two main reasons. (I am not an expert in methods of randomisation.)

1. Using the National Identification Card number (a deterministic method of allocation) means that there is a danger based on open allocation, which should be acknowledged.

(see http://www.bmj.com/content/319/7221/1372).

2. I am not clear that thereafter there was then an equal chance of allocation to intervention or control. The manuscript says; “A valid National Identification number consists of one English letter and followed by nine Arabic numerals….Participants with an ID card ending in an odd number were assigned to the study group, and those with an ID ending in an even number were assigned to the control group.” If there are only nine (and not ten) numerals used in the ID card system – then there should be a 5:4 chance of allocation, which is not equal.

It might help to clarify what the ITT analyses (CM v CM+CPC) and the per-protocol analyses (CM v CM+CPC+ReadCPC) are for the readers.

The authors may still be capitalising on selection biases in reporting the per-protocol analysis for the effectiveness of the intervention and these results might therefore be misleading. The authors have now included an ITT analysis and additional comments in the Discussion, which have gone some way to addressing this issue.

However, the issue of capitalising on biases persists and should be specifically mentioned in the Discussion. Not only were 106 subjects excluded from the intervention group for the per-protocol analyses, there would have been a sub-group in the controls with similar patient characteristics that were retained in the analyses, producing potential biases. An example of a known confounder can be seen in Table 1 - where the 106 excluded subjects had a significantly higher proportion of “previous history of suicide attempt” – a known strong predictor of suicide reattempt.

Other Issues:

Background
The primary outcome of this study is a suicide reattempt. The literature about suicide reattempt rates (e.g. systematic review by Owens) and interventions to reduce reattempt (e.g. systematic review by Hawton) would be more relevant than the references about suicide death. Any differences in Taiwanese suicide reattempt rates in contrast to the systematic review rate estimates would be useful.

Methods

Subjects

“When individuals who had attempted suicide within the previous month were found by suicide prevention gatekeepers in medical or non-medical organisations…” and

Procedures for case management and the crisis postcard intervention

“After receiving the subjects’ information from the national suicide prevention reporting sheets, we contacted the suicide attempters via telephone or a home visit within one week of the attempt…”

This seems to be a contradiction.

Randomisation and study profile

“In Taiwan, every citizen had an equal chance to get a unique ID number provided by the National Department of Internal Affairs regardless of your sex, race, skin color and inhabitation.”

I do not understand what “inhabitation” means in this context.

Statistical analyses

“The primary outcome measure was the occurrence of a suicide reattempt during a 6 month follow-up period.”

The authors report both a chi-square analysis for difference in proportions (not mentioned in Methods) and a Cox Proportional Hazard for this primary outcome – it is not clear to me why the authors feel both analyses are necessary.

Results

Suicide reattempts

The first paragraph is rather difficult to read and digest. It does contain important descriptive information (mean or median times to repetition).

Discussion

“The major finding of the present study was that the crisis postcard intervention in addition to case management was more effective than case management alone in preventing suicide reattempts over a six month follow-up period.”

I feel this is too strong and would suggest some softening e.g.

“The major finding of the present study was that the crisis postcard intervention in addition to case management was more effective than case management alone in preventing suicide reattempts over a six month follow-up period, in the per-protocol analysis.”
“Carter indicated that the postcard intervention was effective for reducing deliberate self-poisoning episodes among those who frequently attempted self-poisoning (13).

This might be more accurately expressed as “Carter indicated that the postcard intervention was effective for reducing deliberate self-poisoning episodes in a sub-group analysis of those with a previous history of self-poisoning (13).

“Secondly, the subjects were tracked by the national suicide prevention reporting system, allowing for complete follow-up.” This statement should be referenced. The possibility of measurement biases in such a national system should be addressed.

Conclusion

“The crisis postcard intervention appeared effective for preventing suicide reattempts among suicide attempters and was beneficial for female subjects and those with a previous history of multiple suicide attempts.”

Again – I think this is too strong – overstating the results (as above) and the text elsewhere suggested “history of previous suicide attempt” rather than “previous history of multiple suicide attempts”.

Table 1

The footers are incorrect “statistically significant differences”

Table 2

Should include ITT result

“Previous history of suicide” – should be suicide attempt and Hazard ratio is reported as increased, which is inconsistent with the text.

Figure 3

Is this Title correct?

“Fig. 3 Survival curves comparing the time to suicide reattempt between case management (CM) and CM with crisis postcard groups. (HR=0.39, 95% CI= 0.21 – 0.72)”

Should this read “Fig. 3 Survival curves comparing the time to suicide reattempt between case management (CM) and CM with crisis postcard groups +read crisis postcard . (HR=0.39, 95% CI= 0.21 – 0.72)”?

Style issues:

The authors refer to the study group and the control group in the manuscript. I would think that both groups together constitute the study group. Perhaps the intervention group and control group might be more accurate.

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare no competing interest