Author's response to reviews

Title: Risk stratification and rapid geriatric screening in an emergency department - a quasi-randomised controlled trial

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Author's response to reviews: see over
Cover Letter

Title

Risk stratification and rapid geriatric screening in an emergency department – a quasi-randomised controlled trial

Reply by Principal Author

Thank you very much for reviewing this article. I am humbled by the comments provided, and am very appreciative of the time and effort you have afforded to help improve my paper.

(Addendum 21 Aug 2014: Trial registration number added to abstract.)

Response to Reviewer: Jane McCusker

(1) Methods: Consent procedures need to be described. Was consent obtained after allocation? Verbal consent is mentioned for the intervention group – what about the controls?

Under ‘Method’ – ‘Study Design’, added: Verbal consent was obtained after allocation: the control group via a telephone call by the research assistant (RA) after the patient had already left ED; intervention group by the GEM nurse whilst the patient was still in ED (lines 96, 109, 114)

(2) Data collection: were baseline interviews conducted by same staff in intervention and control groups?

No, baseline interviews were conducted by different staff in control and intervention groups. The control group was interviewed via telephone by the research assistant (RA) within 3 days of discharge from ED (line 109); the intervention group was interviewed by the GEM nurse while the patient was still in ED (line 114).

(3) Blinding – were telephone follow-up interviewers blind to allocated intervention?

No, the RA who collected the BADL and IADL scores via telephone call was not blinded to the group allocation (line 327). I’ve added the description that this was a major limitation.

(4) The large number of intervention group patients who did not receive the intervention and of control group patients who did receive the intervention are major limitations. Were these “missed” group of patients followed also (necessary for an
intent-to-treat analysis)? The authors should do a sensitivity analysis by treatment received.

No, the “missed group” did not receive follow-up and therefore were excluded from analysis. I’ve added results of a per protocol (PP) analysis (Table 4) and described this under both ‘Results’ (line 212) and ‘Discussion’ (line 273).

(5) The TRST screening results are difficult to understand. Was a score of 2+ or 3+ an eligibility criterion (discrepancy between text, and Figure).

Patients with TRST score of 2-and-above were considered ‘at risk’ and were recruited. However, within this study group, patients who with a TRST of exactly 2 were presumed to be ‘lower risk’ and were compared with patients with a TRST of 3-and-above. For example, the intervention group had a higher proportion of patients with a TRST score between 3-6 (34.3% intervention vs. 25.4% control, p<0.01), suggesting that the intervention group might have been more at-risk (line 177).

(6) The 11.8% admission rate in intervention group is interesting, and requires some discussion.

I’ve added discussion on this under ‘Discussion’ (line 263).

(7) The study limitations need more discussion and should be mentioned in the Abstract.

Section on Limitations has been expanded (line 310). The major limitation of large ‘Refusal’ and ‘Missed’ groups has been mentioned in the Abstract (line 33).

Minor issues:

(1). The location of the study should be mentioned.

Done. Added: The setting was the ED of a 1,500-bedded acute care public hospital in Singapore (line 78)

(2) Introduction : 2nd paragraph needs references.

Done. Referenced: 1, 10, 11, 12 (line 54-62).

(3) Figure 1: exclamation marks in the boxes?

Fixed – Figure 1
(4). Baseline ADL/IADL measures: what was the reporting reference period, current function or pre-morbid function?

Under ‘Method’ – ‘Study Design’, added: For baseline BADL and IADL, the function prior to the current injury or illness was solicited. (line 104).

Response to Reviewer: Fabio Salvi

Major Compulsory Revisions

1) The Authors analyzed data following the intention-to-treat principle: I think this is correct by I would like to see also the results by excluding "mixed" patients and by considering them as cases (adding them to the intervention group). I think this should dramatically reinforce the study results. I think it is also methodologically correct because emergency physicians were not blinded to the results of the screening...

I’ve added results of a per protocol (PP) analysis (Table 4) and described this under both ‘Results’ (line 212) and ‘Discussion’ (line 273).

2) Lack of blindness of the RA who made telephone follow-up is instead a severe limitation of the study and should be even more seriously considered.

I’ve added the description that this was a major limitation (line 327), and elaborated on it.

Minor Essential Revisions

a) ABSTRACT and text (METHOD: Study design) disagreed about even- or odd-numbered patients enrolled in the control or intervention groups

Corrected

b) BACKGROUND: references 13-15 are cited before than 11,12 in the text.

Corrected

c) BACKGROUND: please consider to cite the largest study of comparison between ISAR and TRST (Salvi F et al. Rejuvenation Res 2012).

Done. Referenced: 18, 19 (line 69)

d) METHOD (The setting): annual rate of 180,000, but Figure 1 reported 176,000 for at least (see below) 13 months. Please correct the estimate.
e) METHOD (The setting): among eligibility criteria, TRST score lacks mark as 
"(2)".
Corrected

f) METHOD (The setting): please declare how you defined an advanced state of 
dementia.
Added: …as defined by an inability to provide a reliable history (line 84).

g) METHOD (Control group): please clarify the sentence "within 3 days of discharge 
to collect data regarding the outcome measures up to 12 months".
Changed to: They were contacted via telephone by the research assistant (RA) within 
3 days of discharge from ED. The purpose of the phone-call was to obtain consent for 
study participation, as well as baseline BADL and IADL scores (line 108)

h) RESULTS (Recruitment): text (1st line) and Figure 1 reported different study 
periods.
Corrected. Should be: between 4th July 2011 and 11th August 2012

i) RESULTS (Positive Findings & Intervention): Figure 2 (not 3) described the results 
reported in the last line of text.
Corrected

j) DISCUSSION (line 213): "Results of geriatric screening in the ED has been mixed" 
is grammatically incorrect (have been).
Corrected

k) Reference 10: "Tommaso, G." is instead "De Tommaso, G." l) Reference 20: is by 
"Adams, J.G., Gerson, L.W."
Corrected

l) Reference 20: is by "Adams, J.G., Gerson, L.W."
Corrected