

Reviewer's report

Title: Essential trauma management for internally displaced people of eastern Burma: Scaling up the workforce and diversifying health workers' skills to address service delivery needs of communities in active conflict zones.

Version: 1 **Date:** 27 August 2008

Reviewer: Michael MM Menchine

Reviewer's report:

This article is absolutely fascinating. The topic is both novel and has significant implication for world-wide health policy. The authors should be commended for such a courageous undertaking.

Overall, the article is well written – although there are some minor changes I would suggest that are detailed in the specific comments section.

My main critique of the article the specific research objectives are not clearly spelled out. As a result, I think the article wanders and has a tendency to lose focus and mix messages. Perhaps this confusion stems from my familiarity with more traditional medical journal writing / reviewing and unfamiliarity with this type of research. Nevertheless, I think some revisions designed emphasize what I think are the authors' main objectives could make this paper more outstanding than it already is.

For example, the end of the background section states “we describe the development of the TMP.” Ultimately, I guess this is an article that attempts to describe the feasibility and value of TMP. The methods and results section of this paper expand well beyond a description of the development of the TMP- Indeed, outcome data are provided etc... By my reading, the objectives of this article are at least to: 1) describe the development of the program – conditions, training, personnel, conditions, resource utilization etc... of TMP and 2) describe the preliminary outcomes of this training- specifically, how many people completed the course, how much it costs, did they use the procedures in the field and finally some outcome data on the patients. I think these 2 (or more) objectives should be very explicitly stated in the background section. Then, specific statements about the training should be made. I suppose I would use the standard of “would another would-be organizer be able to launch a similar program based on the information we have provided” to determine if sufficient detail is given in the methods section.

There appear to be significant political overtones to the article although these are not expressly stated. As a reader I infer that the organizers are not friendly to the military regime in Burma. Is the feeling reciprocal? What are the tensions like- How are they managed? What are the implication of these tensions for someone considering a similar project in another part of the world. I would recommend

being as explicit as possible to address these issues as these may be a major consequence to other organizers.

I would consider a revision with the following key elements:

Background

Emphasize that there is a huge world-wide need for trauma training in war-torn or previously war-torn regions. Emphasize that this is a special skill and that no one has developed much of a curriculum for its teaching in terrible conditions.

Describe your objectives.

Method

How was the curriculum developed, who are the participants, where is it located, what resources were needed, how did you recruit participants (both the teachers and students) what are the political barriers to implementing this program, what other conditions were present that have impact on a "would-be TMP organizer." How did you determine if the program was successful (interviews) data forms etc...

Results

How many people were trained, how long did it take, how many people did they in turn train, did they use the techniques, is this a feasible and worthwhile project for someone to undertake

Discussion

This is a feasible (xx number TMPs trained per money and time spent) and worthwhile (they used the techniques and may have saved lives) program.

Specific Comments

Background-

This section is well-written, but there are some holes. It seems that one of the main issues is that there are very few trauma curricula for backpack-type workers. Is this true? If so emphasize it- you just implemented a brand new curriculum.

Page 1

Lines 8-10 would just re-write "4% death were attributable to LMs. This translates to 1 per 1000 person per year."

Line 12+ is where the background becomes somewhat politicized. Although this is obviously a politically charged topic, I would recommend the authors de-emphasize the political issues as this is not a significant part of the methods and results of the paper. If the authors wish to highlight the political climate, then I would recommend including this in the methods and results section. For example statements like "Among the most appalling features..." although truly appalling, these statements really are about politics, not landmine or trauma injuries and they tend to make me, as the reader lose sight of the exact purpose of the article. I would only include such information inasmuch as it helps us

understand that the victims of landmines are often civilians.

Page 2

Is there a reference for "... the vast majority require amputation"?

Line 14- I would elaborate on the fact the four cuts policy and the manner in which it has de-vitalized the health care infrastructure. Is this an active process the govt uses to prevent healthcare to the entire region?

Last paragraph

Recommend explicitly stating that the objective of this paper are 1) describe the development of the program – training, personnel, conditions, resource utilization etc... of TMP and 2) describe the preliminary results of this training. I am particularly interested in the \$ resources needed and expert knowledge needed to make TMP a reality.

Method

What is the KDHW- NGO? Where are these located- this is the first mention of the Karen State- Is this in Eastern Burma? Is this at the Thai-Burmese border. I think it is critical to describe these organizations in a bit more detail.

Page 4

Line 1 – sentence "these teams refer..." should be re-worked

What is Mao Tao Clinic. Please describe what these workers learn in their 4-18months. Is this intensive training or not.

Sentence – "the TMP boosts moral..." seems more fit for the result section or discussion section

Para 4- This section should be expanded

Is this the TMP course- 4 days in conj with GHAP (who's GHAP by the way???) and KDHW . Who are the teachers exactly, MDs from where? Who are the learners? What kind of experiences do you know about them- Had any of them ever done an amputation etc... What portion of the course is taught be lower level vs higher level people.

Para 5 sentence "Recognizing that injury...." is difficult to comprehend- would re-write.

Would start this paragraph with the sentence

"The curriculum covers..." and later describe the actual sources of content.

Page 6

"TMP has secured funding..." Do you have any estimate of how much such a standardized set costs?

Method part 2 – Pilot data on the effectiveness of TMP on patient outcomes

Results section

What is the total number of people trained by TMP (not 20 / year but 140???). DO you have any estimate of how many people these people have trained- In the method section you describe “advanced and basic curricula for field training” Are these people included , are they seeing any of the patients on whom the survival analysis is conducted. Frankly, it almost seems like the fact that these TMP folks have developed their own curricula and moved it into the field should be part of the result section. Logically, it goes... TMP trained them and as a result they were inspired to train the locals – this is a result of TMP effort.

Why from June 2005-07 – Is this when the data sheet was implemented- Please describe the choice of dates in the method section (method part 2)

Para 2 . In this result section, I would include something about how the curriculum developed by TMP did or did not successfully incorporate xx% of the injuries the graduates encountered. (Again, the logic would be that we trained them on land mines and they only saw GSWs or TMP really hit the nail on the head and trained the field operatives for everything they encountered.)

Para 4 – response times- There are some statements made about response times that should have elaboration- Is there a statistical tests of significance being applied to determine whether response times were longer or not? I’m not sure what to make of the fact that the dead were seen faster than the survivors- I would de-emphasize that point as it is likely due to statistical noise.

Para 5- What method of interview was conducted to determine the modalities used- “We conducted unstructured interviews or xx TMP workers” The method used to determine the modalities should be moved to the Methods section.

Do you know how often amputation was performed?

What proportion of the people treated were treated at the scene / village vs. transferred to a semi-permanent clinic?

Do you know how long the TMP graduate spent with most patients?

Do you know how long it took them to reach the patient once they were notified?

What is the procedure for getting a TMP person to the injured patient.

Did the TMPs report any adverse events that arose because of their treatments- ie. I tried to amputated a guys arm with Ketamine, lost his airway and he died? This will be a pertinent negative.

Most commonly used abx is probably not overly relevant as this is undoubtedly determined not by the TMP course but by availability (if that’s all that’s in the back pack...)

Discussion

The discussion does not address the primary goal of the investigation- That is, the authors report a very successful program that trained xx number of TMPs with xx resources. Their training was appropriate for the injuries encountered, the TMPs did the procedures that were taught etc...

Para 3- Would remove sentence "However, we have reasonable..." Just make the case without too much editorializing- In the end the data for survival benefit is suspect due to the small number of cases. I am relatively convinced that the program helps with mortality but I wouldn't make that the emphasis of the discussion. It is clear to me that this type of program can be implemented in relatively austere conditions to people with limited trauma training and/or health care experience and with few financial resources. This is the message I think is more solidly supported by the paper.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'