Author's response to reviews

Title: The Physicians Unique Role in Preventing Violence: A Neglected Opportunity?

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Author's response to reviews: see over
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Claire Tree-Booker, PhD
Assistant Editor
BMC Medicine
Dear Claire

Thank you for your interest in our manuscript and the excellent review which you provided. I have attached a track changes version of the document, which may unfortunately be a bit cluttered by the notation of all the track-changes for the references.

We have changed the title to fit with what you suggested; is “The Physicians Unique Role in Preventing Violence: A Neglected Opportunity?” more along the lines of what you had in mind? If not, perhaps we can try something else.

Please, when the article is published, use a corresponding author e mail of umhau@jhu.edu. This is change is important to me, as one day I will leave NIH and will not have access to the NIH e mail which you are using now. I ma not sure how to make such a change in the on line computer upload system without losing NIH payment for the article. Thank you for making this change in the final version of the on line paper.

Below you will find a detailed accounting of our response to the reviewers comment. Following these two sets of comments, you will find the revised manuscript with the changes tracked.

Sincerely;
John
John C. Umhau MD, MPH
Author Response to Reviewer: Gabriella Gobbi:
Thank you, Dr Gobbi for reviewing our paper and providing so many helpful comments. Our paper is better because of you efforts. We have changed the title following the recommendation of the editor. You will note your comments are in italics.

Abstract: please cancel the adjective “astute” clinician. Regarding violence prevention it should no exist “astute” vs “non-astute ” clinician, but a medical-evidences science and a knowledgeable physician.

This change has been made to “knowledgeable clinician” in the abstract. However, I make this change reluctantly, only because it seems to be a non-negotiable issue. If possible I would like to change it back. The word astute, defined by the Miram-Webster dictionary as: “having or showing shrewdness and perspicacity <an astute observer>” is exactly the meaning I would like to impart. In the summary, the sentence containing the word astute has been eliminated, and for clarity, changes have been made in the summary.

Page 3. The framework and definition of violence is not very well defined at the beginning of the chapter, indeed in the first paragraph, they report: “intermittent explosive disorder”, and later about “violence”. I understand that there is no clinical definition of violence or aggression. I suggest to use the definition of World Health organization (http://www.who.int/topics/violence/en/) as well as the DSM-IV definition of explosive disorders.

The DSM-IV definition of explosive disorders has been incorporated on page 4: “For most clinicians, the clinical perspective of violence as seen with Intermittent Explosive Disorder, specified by DSM-IV to encompass “several discrete episodes of failure to resist aggressive impulses that result in serious assaultive acts or destruction of property”, with the further specification that “the degree of aggressiveness expressed during the episodes is grossly out of proportion to any precipitating psychological stressors”[1] provides a framework for addressing this issue from a clinical standpoint.”


This article being for a large broad of scientists and clinicians, it would be interesting to add a figure representing brain areas implicated in the aggression and how these areas are affected by the pathologies described in Table 1.

We have extensively edited this section and added these citations. We like the idea of a figure, but have not been able to come up with one.

Page 7: There are a lot of serious scientific mistakes.

"In other studies, anticonvulsants such as carbamazepine have been shown to reduce impulsive violence. Beta-blockers can reduce the autonomic activity which accompanies explosive rage, and they are often used to treat violence after head injury." This paragraph lacks of citations. The use of anticonvulsivants in the treatment of violence is more complex and requires more appropriate analysis and citations (see Comai et al., The psychopharmacology of aggressive behavior: a translational approach: part 2: clinical studies using atypical antipsychotics, anticonvulsants, and lithium. J Clin Psychopharmacol. 2012 Apr;32(2):237-60.).

“Antipsychotic agents can be used when psychotic disorders are present”. Please delete this statement. Antipsychotics are used in patients with violence without psychotic disorders, as PTSD, autism, mental retardation, etc.

We are grateful for this comment, and have removed much of this paragraph. We have abbreviated what we do state and refer to other reviews.

We now state on page 7:

“The point of this article is to introduce existent therapeutic options rather than to provide a detailed review of pharmacotherapy.”

“Nutritional factors, especially the essential omega-3 fatty acids, docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA)...”. Even if in the last years several researches have claimed the use of omega-3 in psychiatric disorders, other studies were negative. It is important to be more critical concerning this naturalistic approach, without giving false expectations. “Omega-3 fatty acid (i.e. fish oil) has the benefit that it can be readily accepted by patients who see nutritional supplements as a more "natural" type of therapy with no stigma and few side effects”. This statement should create false expectations since severe aggressive behavior cannot be solved with nutritional factors, the authors should rephrase this sentence.

I appreciate the expressed concern to have a more critical appraisal of the literature. I have rephrased the paragraph as noted below to give a more balanced viewpoint. In the revision, I added the qualifying word “some”: “Some controlled trials suggest that these nutrients may reduce aggression.” In the revised version of the paper, I have noted the replication of the Gesch prison study[2]. I also now describe a critical need for more research to resolve controversies in this area: “Because of the potential for nutritional therapy to address the problem of violence on a public health basis, there is
a critical need for more research to resolve controversies in this area.” However, because there are millions of individuals afflicted with intermittent explosive disorder, highlighting non-prescription nutrients seems appropriate. A recent article evaluating this issue supports the use of omega-3’s in psychiatry[3]. Also, many studies using omega-3 fatty acids for psychiatric conditions seem to be of short duration, considering the half life of DHA in the human brain is 2.5 years [4]. Regarding studies specifically evaluating an effect on violence or aggression, I am unaware of any published studies using omega-3 fatty acids which reported negative results, so I am unable to cite a negative study as you suggest. I am unaware of data indicating that any “severe aggressive behavior cannot be solved with nutritional factors”; but in table 1 cite a number of papers which describe violence as symptom of nutritional deficiency[5-13]. I have rephrased the paragraph and cited additional references as follows:

“Nutritional factors, especially the essential omega-3 fatty acids, docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are critical components of the nervous system, but can be deficient in the diet [14-16]. Some controlled trials suggest that these nutrients may reduce aggression and produce other benefits with few side effects[17-19]. In recognition of this, the American Psychiatric Association recommends that individuals with mood, impulse-control or psychotic disorders consume 1 gram of EPA + DHA per day [20]. When essential fatty acids were administered with multiple vitamins to young men in prison, violence was reduced by one third [21], a finding which was later replicated [2]. Although there are many more studies demonstrating the effectiveness of prescription pharmaceuticals than there are of studies testing nutrients, omega-3 fatty acid (i.e. fish oil) and vitamins have the benefit that they may be readily accepted by patients who desire a more “natural” type of therapy without the stigma and serious side effects which sometimes accompany psychotropic medications[22]. Because of the potential for nutritional therapy to address the problem of violence on a public health basis, there is a critical need for more research to resolve controversies in this area.”

Page 8-9: “Alcohol treatment as therapy for aggressive behavior”. This paragraph is very appropriate. However, since cocaine is also a factor for violence, cocaine addiction treatment should also be cited.

I am unaware of any specific article that demonstrates that cocaine treatment will reduce violence, however, we have changed the paragraph heading title and have now added the following sentence and reference: Cocaine abuse is also associated with violence[23].

Page 9. “Treatments specifically for domestic violence include feminist psychoeducational men’s groups, men’s CBT groups, anger management and couples therapy.” It is not clear what “feminist psycho-education men’s group” means. This paragraph has no appropriate citations.

The Babcock citation is the source for this paragraph, and I have cited it again in the sentence below. The feminist psycho-educational men’s groups refer to treatment following the Duluth model, a widely treatment, and we now add this to this sentence:
Treatments specifically for domestic violence include feminist psycho-educational men's groups, (i.e the Duluth model), men's CBT groups, anger management and couples therapy[24].

This last paragraph seems an anecdotal/ case report section, completely different from the rest of the article. It should be more “scientific” with appropriate citations of the literature.

We have removed the section on “Patient Perspective”

References
Author Response to Reviewer: Scott Lane.

Thank you, Dr. Lane, for your very helpful comments and encouragement. We have changed the title following the recommendation of the editor. You will note your comments are in italics.

1. This manuscript reads as a call to action, and this is appropriate as the topic addresses an under noticed problem in clinical medicine. However, the basic message can be addressed more succinctly than the present format. I suggest considering either revising this manuscript as a short report, or expanding it to deal more formally and in more detail with regard to scientific and diagnostic issues.

We have kept the format as a debate article, and have tried to make the paper more succinct by shortening the pharmacotherapy section and eliminating the patient perspective. Previous attempts to construct a shorter paper were unsatisfactory for many reasons. We have tried to describe our purpose on page 4 by stating: “This paper will give a brief review of the clinical approach to this often ignored yet common problem.”

2. Intro and throughout the ms: The paper appears to focus specifically on intermittent explosive disorder with regard to etiology and treatment of aggression. Do the authors intend only to deal with impulsive aggression? If so this should be clarified. Additionally, if the focus is solely on impulsive aggression, then the connection with frequently-associated (and often comorbid) disorders such as substance abuse, antisocial personality disorder, and borderline personality disorder should be covered in the ms. If not, then a contrast with premeditated, goal-directed forms of aggression (less common but certainly a feature in several patient populations) should be addressed, including the construct of psychopathy (e.g., antisocial, callous unemotional traits), and the connection with homicidal behavior and severe depression. At a minimum, the paper should state up front that issues will not be addressed because they are beyond the scope of the paper.

We agree with the reviewer and have made a number of clarifying changes in the first paragraph of the Background:

“While violence can be premeditated, goal directed, and related to antisocial, callous unemotional traits, these types of violent behaviour are beyond the scope of this paper. For most clinicians, the clinical perspective of violence as seen with Intermittent Explosive Disorder, specified by DSM-IV to encompass “several discrete episodes of failure to resist aggressive impulses that result in serious assaultive acts or destruction of property”, with the further specification that “The degree of aggressiveness expressed during the episodes is grossly out of proportion to any precipitating psychological stressors”[1] provides the framework for addressing this issue from a clinical standpoint. Because these individuals may feel a deep concern about this unwanted behaviour, it is clearly a behaviour that warrants the concern of their physician. Intermittent explosive disorder has a prevalence of 3.9%, suggesting that each year in the United States, it is responsible for more than 30 million violent assaults”
Also, on page 9 we now state:
“Impulsive aggression is frequently found in a co-morbid association with substance abuse and with personality disorders.”

3. Background, page 3: While hostility and impulsive aggression are not commonly the presenting complaint in outpatient clinical settings (save for adolescent mood and externalizing disorders), this behavior is a common reason for involuntary commitment to an inpatient psychiatric setting.

To clarify this we have made several changes. In the Background section we state:
“The symptom complex characterized by repeated episodes of explosive rage and violence, disproportionate to any provocation, is rarely a patient’s chief complaint, but it is a common problem none the less.”
We now state at the end of the diagnosis section:
“When patients do present with violence, it is a common cause for involuntary commitment to a psychiatric facility and acute therapy[2, 3].”

4. Page 4: The section on neurobiology is underdeveloped and overly simplistic. It uses non-scientific jargon in several places. This section should be edited (if a revised brief report is chosen), or it needs to be expanded with more complete and technically precise information.

We have edited this section extensively, but continue to aim this paper for the general practitioner; we now cite a number of reviews for the reader who desires more information.

5. Page 12, summary: There are suggestions made regarding identifying and potentially treating patients who have problems with impulsive aggression. Here it should be noted that there are several well validated psychometric measures of impulsiveness, hostility, and aggression that could be valuable tools. Some of the more common instruments include the BIS-11 (Barrat); EIVQ (Eysenck); BPAQ (Buss & Perry); LHA (Coccaro); and STAXI (Spielberger).

This is an excellent suggestion. We have added the following sentence on page 7: The use of valid scales, such as the STAXI[4] and the BPAQ-SF[5] may be helpful in identifying such patients.

Minor considerations
6. Page 2: the phrase “this behavior is rarely apparent” is unclear are perhaps misleading. Please revise and clarify.
We now state:
In the community this behaviour is seen as workplace violence, domestic abuse and road rage, while in the clinical setting, this behaviour is rarely mentioned by patients, despite evidence that it can signify an important biological disorder that may afflict more than three percent of the population.

7. Background: Many of the claims lacking supporting references. The table is thorough, and the references that populate the table could be used in the text to support many of the assertions.

We have added many references to this section.

8. Page 6-7: The section that describes pharmacotherapy should have a separate heading.

We have given this a separate heading.

9. Page 11: The section on patient perspective seems out of place with the rest of the ms, and detracts from the overall impact. Suggest removing this section.

We have removed the section on “Patient Perspective”

Quality of written English: Acceptable

Statistical review:

References: