

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Does pain, psychological distress and deteriorated family economy follow traumatic amputation among war casualties? A retrospective, cross-sectional study from Gaza.
AUTHORS	Heszlein-Lossius, Hanne; Al-Borno, Yahya; Shaqqoura, Samar; Skaik, Nashwa; Gil, Lasse; Gilbert, Mads

VERSION 1 - REVIEW

REVIEWER	Luke PH Leenen UMC Utrecht The Netherlands
REVIEW RETURNED	03-Mar-2019

GENERAL COMMENTS	<p>This article evaluates the consequences of amputation after war related trauma in Gaza.</p> <p>For evaluation of psychological stress the GHQ-12 questionnaire was used as were several proxy values for economic status and social circumstances.</p> <p>In total 254 patients were evaluated. Main conclusion was that socioeconomic circumstances were more important for the pain and psychosocial status than the anatomy and level of amputation. The majority of the patients was unemployed and a major part of the population was in this status because of the fact they got an amputation (NB self reported!).</p> <p>This is a straight forward study. All the major limitations are already detailed by the authors, however are rightfully addressed. Still a few questions remain, as it is still not fully clear what kind of population we are dealing with, but also whether there is some form of differentiation between the patients.</p> <p>What was the genesis of the lesions? Was it crush, gunshot wounds, motor vehicle accident or explosion (eg landmine)? As these differences can have impact on wound healing, pain awareness, coping. In line with this, were those victims in active combat (eg were they active warriors) and what are these</p>
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REVIEWER	Susana Pedras CESPU- Cooperativa de Ensino Superior Politécnico e Universitário, CRL Institute of Research and Advanced Training in Health Sciences and Technologies (IINFACETS), Gandra, Porto, Portugal.
REVIEW RETURNED	10-Mar-2019

GENERAL COMMENTS	Comments to authors:
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	<p>This is a very important and serious subject and I congratulate the authors for their work. However, in order to this paper can be published, it needs some adjustments.</p> <p>“We wanted to study the impact of psychosocial factors (income, unemployment) on psychological distress and pain in Palestinian patients who had sustained traumatic extremity amputations and were attending rehabilitation in Gaza”. - I suggest that the goal of the study be described as follows: We wanted to find out whether psychosocial factors (income, unemployment) were significant predictors of the level of psychological distress and of the presence or absence of pain in Palestinian patients who had suffered traumatic extremity amputations and were attending rehabilitation in Gaza.</p> <p>The authors said: “Lost one or more limb(s)”. It would be important to have a variable named number of amputations.</p> <p>In the inclusion criteria, the authors stated, “Being a Palestinian resident above the age of 16 years at the time of inclusion”, and the table1, reports 43 children. Were these children the residents above the age of 16 years?</p> <p>The General Health Questionnaire (GHQ-12) was used to assess psychological stress but it is important to have the psychometric characteristics (Cronbach alpha), At Page 8, line 32 – “...had GHQ-scores above the cut-off of 3 points indicative of psychological distress”. This information regarding the interpretation of GHQ should be included in the instruments section.</p> <p>The study included a socio demographic questionnaire? It included education level, marital status (married, divorced, widow, etc). If yes, this information should be included in this paper in order to know in more detail the sample of the study.</p> <p>“Table 1 summarizes the patient characteristics”. I have some concerns regarding the presentation of the information.</p> <ul style="list-style-type: none"> - Children: it should be reported as participants' bellow 16 years. - Family income, NIS – NIS= New Israeli Shekel. 1 NIS equals 0,26 US Dollar. In the table, I think that the USD value should be presented along with the NIS value, to facilitate the international` readers interpretation. - Age –Inclusion, years 28 [10]*, Age-Injury, years 23 [9]* - the continuous variables must be reported with mean and standard deviation (SD) values. - * Median and interquartile range, otherwise percentage – median is also an important value to report but when we present mean value we must report SD. <p>Statistical analysis: Logistic and ordinal regressions were used for multivariate analysis. The authors should explain that a linear regression was made to find the predictors of GHQ, since the QHQ variable was interval; and a logistic regression to find the predictors of the presence or absence of pain.</p> <p>At the discussion, it would be important to suggest some community, social and political ideas and measures to change the unemployment situation of this population.</p> <p>Best regards,</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 1

Reviewer Name: Luke PH Leenen

Institution and Country: UMC Utrecht

The Netherlands

Please state any competing interests or state 'None declared': Non declared

Please leave your comments for the authors below

This article evaluates the consequences of amputation after war related trauma in Gaza.

For evaluation of psychological stress the GHQ-12 questionnaire was used as were several proxy values for economic status and social circumstances.

In total 254 patients were evaluated. Main conclusion was that socioeconomic circumstances were more important for the pain and psychosocial status than the anatomy and level of amputation. The majority of the patients was unemployed and a major part of the population was in this status because of the fact they got an amputation (NB self reported!).

This is a straight forward study. All the major limitations are already detailed by the authors, however are rightfully addressed.

Answer: Thank you ever so much for your review, help and comments. We truly value your feedback.

7) Still a few questions remain, as it is still not fully clear what kind of population we are dealing with, but also whether there is some form of differentiation between the patients.

Answer: We hope this answer clarifies: The population consists of 254 civilian Palestinians who had survived but lost one or more limb(s) during military incursions from 2006-2016. They have all been amputated in military attacks. They are all attending rehabilitation in Gaza. There are no major differentiation between the patients. (Also included in the material and methods section under study participants.p 5)

8) What was the genesis of the lesions? Was it crush, gunshot wounds, motor vehicle accident or explosion (eg landmine)? As these differences can have impact on wound healing, pain awareness, coping. In line with this, were those victims in active combat (eg were they active warriors) and what are these

Answer: Thank you for pointing out this. The participants were civilians as stated in the abstract, and now also under the methods p 5. We agree that this was not stated clearly enough as it was.

The mechanism of injuries were various weapons (f-16, drones, gun shots, naval shelling, apache, landmines) We have referred to our previous in depth descriptive study of the study population to clarify the mechanism of injuries. At page 6.

Reviewer: 2

Reviewer Name: Susana Pedras

Institution and Country:

CESPU- Cooperativa de Ensino Superior Politécnico e Universitário, CRL

Institute of Research and Advanced Training in Health Sciences and Technologies (IINFACTS),
Gandra, Porto, Portugal.

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

Comments to authors:

This is a very important and serious subject and I congratulate the authors for their work. However, in order to this paper can be published, it needs some adjustments.

Answer. Thank you ever so much for your valuable feedback. We thank you for a very thorough and helpful review which is improving our work.

9) "We wanted to study the impact of psychosocial factors (income, unemployment) on psychological distress and pain in Palestinian patients who had sustained traumatic extremity amputations and were attending rehabilitation in Gaza". - I suggest that the goal of the study be described as follows: We wanted to find out whether psychosocial factors (income, unemployment) were significant predictors of the level of psychological distress and of the presence or absence of pain in Palestinian patients who had suffered traumatic extremity amputations and were attending rehabilitation in Gaza.

Answer:

We thank the reviewer for this suggestion, and we have changed the text as suggested (last paragraph page 4).

10) The authors said: "Lost one or more limb(s)". It would be important to have a variable named number of amputations.

Answer: The amputations were classified in an ordinal scale by an increasing order of severity based on proximity to the torso and number of affected limbs. The ordinal scale was as follows: 1 = finger/toes/hands/feet; 2 = below knee or below elbow; 3 = above knee or elbow; and 4 = bilateral amputation or amputation in both lower and upper extremities or unilateral amputation at hip-level/shoulder-level. Meaning that in the variable “severity of injury”, multiple amputations are included in the ordinal scale.

11) In the inclusion criteria, the authors stated, “Being a Palestinian resident above the age of 16 years at the time of inclusion”, and the table 1, reports 43 children. Were these children the residents above the age of 16 years?

Answer: At inclusion all the participants were above the age of 16. However, some of them had been amputated when they were younger, meaning they were children at the time of amputation. We understand that this can be confusing and we have changed the text in table 1.

12) The General Health Questionnaire (GHQ-12) was used to assess psychological stress but it is important to have the psychometric characteristics (Cronbach alpha),

At Page 8, line 32 – “...had GHQ-scores above the cut-off of 3 points indicative of psychological distress”. This information regarding the interpretation of GHQ should be included in the instruments section.

Answer: Thank you for pointing this out! The psychometric characteristics are now included. The information regarding the interpretation is included under methods p 6. Cronbach alpha is reported under methods p 6.

13) The study included a socio demographic questionnaire? It included education level, marital status (married, divorced, widow, etc). If yes, this information should be included in this paper in order to know in more detail the sample of the study.

Thank you for asking for this information. We have previously published a descriptive study on the study population and we have referred to this article under the section study participants at p 5

14) “Table 1 summarizes the patient characteristics”. I have some concerns regarding the presentation of the information.

- Children: it should be reported as participants' below 16 years.

Answer: Thank you for pointing this out. However, the children are not participants under the age of 16, but rather participants who today are above the age of 16, but they were amputated when they were children. The table has been better explained. At p 16

15) Family income, NIS – NIS= New Israeli Shekel. 1 NIS equals 0,26 US Dollar. In the table, I think that the USD value should be presented along with the NIS value, to facilitate the international readers interpretation.

Answer:

Agree and corrected accordingly.

16) Age –Inclusion, years 28 [10]*, Age-Injury, years 23 [9]* - the continuous variables must be reported with mean and standard deviation (SD) values.

- * Median and interquartile range, otherwise percentage – median is also an important value to report but when we present mean value we must report SD.

Answer:

Completely agree. We have reported the median age and the interquartile range. We have not reported the mean age and hence not the SD. This is clarified in the table on p 16

17) Statistical analysis: Logistic and ordinal regressions were used for multivariate analysis. The authors should explain that a linear regression was made to find the predictors of GHQ, since the GHQ variable was interval; and a logistic regression to find the predictors of the presence or absence of pain.

Answer:

We apologize for unclarity of the manuscript regarding the statistical analyses conducted. We applied a binary cut-off to the GHQ-12 scores (bimodal 0-0-1-1) and we thus used the GHQ-12 as a unimodal screening for psychological distress (<https://www.gi-assessment.co.uk/products/general-health-questionnaire-ghq/>). Accordingly, we applied logistic regression. A poisson-regression of the summary scores yielded similar results, but the effect sizes can be more difficult to interpret. The analysis of pain was conducted using ordinal regression. This has now been clarified in statistics. Logistic regression was used to assess association with a binary categorization of the GHQ-12 score (bimodal 0-0-1-1), as described by WHO 22. Ordinal regressions was used for multivariate analysis with pain, a scale described above of increasing pain frequency from 0 till 4, as the outcome. Both models were first assessed with age gender and the independent variable of interest, before adjusting for additional variables.

18) At the discussion, it would be important to suggest some community, social and political ideas and measures to change the unemployment situation of this population.

Answer: We agree and we have included this in the discussion part at p 11

Reference: <https://www.worldbank.org/en/country/westbankandgaza/overview#1>

VERSION 2 – REVIEW

REVIEWER	Luke Leenen UMC Utrecht The Netherlands
REVIEW RETURNED	16-Apr-2019

GENERAL COMMENTS	The concerns have been addressed by the authors
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REVIEWER	Susana Pedras Researcher in CIPD, Centro de Investigação em Psicologia para o Desenvolvimento [Psychology for Positive Development Research Center] Lusíada University, Porto, Portugal
REVIEW RETURNED	21-Apr-2019

GENERAL COMMENTS	I congratulate the authors for their efforts in improving the article to be published. I hope this article sheds light on the serious consequences of the conflict in Gaza. Best regards, Susana
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