

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Prevalence and severity of burnout in Hong Kong doctors up to 20 years post-graduation: a cross-sectional study
AUTHORS	Ng, Amy Pui Pui; Chin, Weng Yee; WAN, Eric Yuk Fai; Chen, Julie; Lau, Chak Sing

VERSION 1 – REVIEW

REVIEWER	Bruno Corrado University Federico II of Naples, Italy
REVIEW RETURNED	18-Jun-2020

GENERAL COMMENTS	<p>This is a cross-sectional study whose main objective was to estimate the prevalence and severity of burnout among medical graduates in Hong Kong. The secondary aim was to analyse the risk factors of burnout within the sample.</p> <p>This is an enjoyable study even if it contributes nothing of new to the topic.</p> <p>Study design and methodology are appropriate as well as statistical analysis.</p> <p>In my opinion, this study has a main limitation: the sample is too limited as regards the age of enrolled physicians. The authors themselves have recognized such a limitation but in the title of the study there is no mention of this.</p> <p>References should be up-to-dated; there are several interesting papers concerning the topic that were published recently. For example:</p> <ol style="list-style-type: none">1. Thrush CR, Gathright MM, Atkinson T, Messias EL, Guise JB. Psychometric Properties of the Copenhagen Burnout Inventory in an Academic Healthcare Institution Sample in the U.S [published online ahead of print, 2020 Jun 15]. Eval Health Prof. 2020;163278720934165. doi:10.1177/01632787209341652. Shanafelt TD, Makowski MS, Wang H, et al. Association of Burnout, Professional Fulfillment, and Self-care Practices of Physician Leaders With Their Independently Rated Leadership Effectiveness. JAMA Netw Open. 2020;3(6):e207961. Published 2020 Jun 1. doi:10.1001/jamanetworkopen.2020.796 <p>English language should be improved a little bit.</p>
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REVIEWER	Ahmed Barakat
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	Brighton & Sussex University Hospitals - NHS trust United Kingdom
REVIEW RETURNED	30-Jun-2020

GENERAL COMMENTS	<p>Thank you for sending me this manuscript for review. The authors describe the prevalence of burnout among Hong Kong doctors in their cross-sectional observational study with an exploration of some of the risk factors associated.</p> <p>The strengths and limitations of the study are well described. The introduction section is also professionally written with a brief description of the Maslach burnout definition and how the Copenhagen burnout inventory aims to rectify some of the shortcomings of that Maslach score.</p> <p>Appropriate use of statistical methods in the results section. The discussion part is also professionally written. Overall, I have no reservations for the publication of this paper, and I see it as high-quality research.</p>
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REVIEWER	Gentile Stéphanie Aix Marseille University France
REVIEW RETURNED	26-Aug-2020

GENERAL COMMENTS	<p>The article is of good quality and well presented. The results are clear and the limits are well developed.</p> <p>I think that the authors should be more precise in the introduction when stating the factors related to not putting "age" but "young age" e.g..</p> <p>They should look for more articles to compare and discuss their results. Young age has already been found as in our article "Burnout Syndrome among Emergency Department Staff: Prevalence and Associated Factors. Audrey Moukarzel, Pierre Michelet, Anne-Claire Durand, Mustapha Sebbane, Stéphane Bourgeois, Thibaut Markarian, Catherine Bompard, 1 and Stéphanie Gentile" but also in other articles.</p>
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VERSION 1 – AUTHOR RESPONSE

Bruno Corrado (University Federico II of Naples, Italy)

Reviewer's Comment

This is a cross-sectional study whose main objective was to estimate the prevalence and severity of burnout among medical graduates in Hong Kong. The secondary aim was to analyse the risk factors

of burnout within the sample. This is an enjoyable study even if it contributes nothing of new to the topic. Study design and methodology are appropriate as well as statistical analysis.

In my opinion, this study has a main limitation: the sample is too limited as regards the age of enrolled physicians. The authors themselves have recognized such a limitation but in the title of the study there is no mention of this.

References should be up-to-dated; there are several interesting papers concerning the topic that were published recently. For example:

1. Thrush CR, Gathright MM, Atkinson T, Messiah EL, Guise JB. Psychometric Properties of the Copenhagen Burnout

Inventory in an Academic Healthcare Institution Sample in the U.S [published online ahead of print, 2020 Jun 15]. *Eval Health Prof.* 2020;163278720934165. doi:10.1177/0163278720934165

2. Shanafelt TD, Makowski MS, Wang H, et al. Association of Burnout, Professional Fulfillment, and Self-care Practices of Physician Leaders With Their Independently Rated Leadership Effectiveness. *JAMA Netw Open.* 2020;3(6):e207961. Published 2020 Jun 1. doi:10.1001/jamanetworkopen.2020.796

English language should be improved a little bit.

Author's Response

Thank you for your comments.

Thank you for your suggestion. We have clarified the title and the objective of the study.

- Title: Prevalence and severity of burnout in

Hong Kong doctors: a cross-sectional study

Title: Prevalence and severity of burnout in Hong Kong doctors up to 20 years post-graduation: a cross-sectional study

- Objective: To estimate the prevalence and severity of burnout and explore the risk factors for burnout among medical graduates in Hong Kong (HK). Objective: To estimate the prevalence and severity of burnout and explore the risk factors for burnout among medical graduates in Hong Kong (HK) up to 20 years post-graduation.

Thank for the additional citations. We have added (1)

as an added reference when discussing the CBI in the introduction. We have added (2) and (3) during the discussion the implications of burnout in the introduction.

(1) Thrush, C. R., et al. (2020). "Psychometric Properties of the Copenhagen Burnout Inventory in an

Academic Healthcare Institution Sample in the U.S." Evaluation & the health professions: 16327872093416.

(2) Shanafelt, T. D., et al. (2020). "Association of Burnout, Professional Fulfillment, and Self-care Practices of Physician Leaders With Their Independently Rated Leadership Effectiveness." JAMA network open 3(6): e207961.

(3) (3) Chung, S., et al. (2020). "The Relationship Between Primary Care Physician Burnout and Patient-Reported Care Experiences: a Cross-sectional Study." Journal of General Internal Medicine: 1-8.

We have made some revisions to the grammar and hope that the article is more concise and clearer to the reader. The revised manuscript has been proofread by two native English speakers.

Ahmed Barakat (NHS trust United Kingdom)

Reviewer's Comment

Thank you for sending me this manuscript for review. The authors describe the prevalence of burnout among Hong Kong doctors in their cross sectional observational study with an exploration of some of the risk factors associated. The strengths and limitations of the study are well described. The introduction section is also professionally written with a brief description of the Maslach burnout definition and how the Copenhagen burnout inventory aims to rectify some of the shortcomings of that Maslach score. Appropriate use of statistical methods in the results section. The discussion part is also professionally written. Overall, I have no reservations for the publication of this paper, and I see it as high-quality research.

Author's Response

Thank you for your comments.

Gentile Stéphanie (Aix Marseille University France)

Reviewer's Comment

The article is of good quality and well presented.
The results are clear and the limits are well developed

I think that the authors should be more precise in the introduction when stating the factors related to not putting "age" but "young age" e.g..

They should look for more articles to compare and discuss their results. Young age has already been found as in our article "Burnout Syndrome among Emergency Department Staff: Prevalence and Associated Factors. Audrey Moukarzel, Pierre Michelet, Anne-Claire Durand, Mustapha Sebbane, Stéphane Bourgeois, Thibaut Markarian, Catherine Bompard, 1 and Stéphanie Gentile" but also in other articles.

Author's Response

Thank you for your comments.

Thank you for highlighting this point. We have added 'younger age' to the introduction.

Thank you for these very helpful suggestions. We have incorporated the additional citation in our discussion as well as the following citations on studies with younger doctors to support our findings.

- (1) Wright, J. G., et al. (2011). "Burnout among faculty physicians in an academic health science centre." *Paediatrics & Child Health* 16(7): 409-413.
- (2) Chou, L.-P., et al. (2014). "Job stress and burnout in hospital employees: comparisons of different medical professions in a regional hospital in Taiwan." *BMJ open* 4(2): e004185.
- (3) Benson, S., et al. (2009). "Burnout in Australasian younger fellows." *ANZ journal of surgery* 79(9): 590-597.
- (4) Siu, A. (2012). "Brain drain of emergency physician in Hong Kong." *Hong Kong Journal of Emergency Medicine* 19(5): 303-304.
- (5) Ratnakaran, B., et al. (2016). "Prevalence of burnout and its correlates among residents in a tertiary medical center in Kerala, India: A cross-sectional study." *Journal of postgraduate medicine (Bombay)* 62(3): 157-161.
- (6) Wolfshohl, J. A., et al. (2019). "Association Between Empathy and Burnout Among Emergency Medicine Physicians." *Journal of clinical medicine research* 11(7): 532-538.