

Response to letter regarding Tobacco smoking

Petersen, B.; Stenager, E.; Mogensen, C. B.; Erlangsen, A.

Published in:
Journal of Internal Medicine

DOI:
10.1111/joim.13068

Publication date:
2020

Document version:
Accepted manuscript

Citation for published version (APA):
Petersen, B., Stenager, E., Mogensen, C. B., & Erlangsen, A. (2020). Response to letter regarding Tobacco smoking. *Journal of Internal Medicine*, 288(5), 607-607. <https://doi.org/10.1111/joim.13068>

Go to publication entry in University of Southern Denmark's Research Portal

Terms of use

This work is brought to you by the University of Southern Denmark.
Unless otherwise specified it has been shared according to the terms for self-archiving.
If no other license is stated, these terms apply:

- You may download this work for personal use only.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying this open access version

If you believe that this document breaches copyright please contact us providing details and we will investigate your claim.
Please direct all enquiries to puresupport@bib.sdu.dk



MR. BENJAMIN DREJER PETERSEN (Orcid ID : 0000-0002-7663-6860)

Article type : Letter to the Editor

Corresponding author mail-id: b.petersen.research@gmail.com

Response to letter regarding Tobacco smoking

Benjamin Petersen MD;¹ Elsebeth Stenager MD;¹ Christian B. Mogensen MD² and
Annette Erlangsen PhD³⁻⁵

¹ Psychiatric Research Unit, Department of Regional Health Research, University of Southern Denmark, Aabenraa, Denmark

² Acute Medicine Research Unit, Department of Regional Health Research, University of Southern Denmark, Aabenraa, University Hospital of Southern Denmark

³ Danish Research Institute for Suicide Prevention, Mental Health Centre Copenhagen, Capital Region of Denmark, Copenhagen, Denmark

⁴ Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland

⁵ Center of Mental Health Research, Australian National University, Canberra, Australia

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/JOIM.13068](https://doi.org/10.1111/JOIM.13068)

This article is protected by copyright. All rights reserved

To the editor:

We thank Dr. HJ Aubin et al [1] for their insightful comments to our study on the association between heart diseases and death by suicide [2] . Dr Aubin and colleagues suggested that smoking might moderate the studied association. This is a highly interesting question; as smoking might increase the likelihood of developing heart diseases. Furthermore, an increasing amount of evidence supports an association between smoking and suicide, although causation is yet to be proven [3].

Indeed, it would be interesting to assess the interactions between smoking, heart disorders and their association to suicide. Danish (and Nordic) register data are excellent for studying health-related outcomes, such as hospital-diagnosed disorders [4,5]. Nevertheless, direct measures of smoking behaviors, such as self-reported smoking, are unfortunately limited in register-based databases. Conversely, indirect markers or proxy measurements for smoking may be found in hospital register. Numerous smoking-related disorders have been linked to suicide [6], for instance, head and neck cancers [7], lung cancer [8] and chronic obstructive pulmonary disease [9]. Interestingly, these disorders were included in the Charlson Comorbidity Index, which was used as an adjusting covariate in our reported findings. It may be assumed that people with lower income levels have a higher rate of smoking. However, this marker could also be a measure for other adverse factors, such as unemployment, chronic disorders, social hardship, and alcohol consumption. Still, our analyses were also adjusted for income level. By adjusting for mental illness, we might also account for the excess smoking noted in this population.

In summary, we cannot exclude that smoking might contribute with a moderating effect to the estimates in reported in our study but some of the effect is likely to have been captured in the rigorously adjusted analyses. As we did not have access to individual level data on smoking behaviors in the present study, it would not be feasible to address these aspects further.

Conflict of interest:

None.

Funding:

None.

REFERENCES

1. Aubin H-J, Legleye S, Thomas D, Berlin I. Tobacco smoking: the likely confounder of the association between heart diseases and suicide. Letter to the editor. *J Intern Med* 2020.
2. Petersen B, Stenager E, Mogensen CB, Erlangsen A. The association between heart diseases and suicide: A nationwide cohort study. *J Intern Med* 2020: joim.13025.
3. Poorolajal J, Darvishi N. Smoking and Suicide: A Meta-Analysis. *PLoS One* 2016; **11**: e0156348.
4. Erlangsen A, Fedyszyn I. Danish nationwide registers for public health and health-related research. *Scand J Public Health* 2015; **43**: 333–9.
5. Erlangsen A, Qin P, Mittendorfer-Rutz E. Studies of suicidal behavior using national registers: An adventure without boundaries? *Crisis* 2018; **39**: 153–8.
6. Stenager E, Stenager E, Erlangsen A. Somatic diseases and suicidal behaviour. In: Wasserman D, ed. *Oxford Textbook of Suicidology and Suicide Prevention*. 2nd ed. Oxford, UK: Oxford University Press.
7. Osazuwa-Peters N, Simpson MC, Zhao L, *et al*. Suicide risk among cancer survivors: Head and neck versus other cancers. *Cancer* 2018; **124**: 4072–9.
8. Henson KE, Brock R, Charnock J, Wickramasinghe B, Will O, Pitman A. Risk of Suicide After Cancer Diagnosis in England. *JAMA Psychiatry* 2019; **76**: 51.
9. Sampaio MS, Vieira W de A, Bernardino Í de M, Herval ÁM, Flores-Mir C, Paranhos LR. Chronic obstructive pulmonary disease as a risk factor for suicide: A systematic review and meta-analysis. *Respir Med* 2019; **151**: 11–8.

Author Manuscript