Author’s response to reviews

Title: Predictive values of upper gastrointestinal cancer alarm symptoms in the general population: a nationwide cohort study

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Author’s response to reviews:

Dear Editors at BMC Cancer,

Thank you for your review of our revised manuscript “Predictive values of upper gastrointestinal cancer alarm symptoms in the general population: a nationwide cohort study”.

Below please find our point-by-point response to your comments:

Stefano Petti (Reviewer 1): The Authors nicely acknowledged my previous comments.

From the Public Health standpoint I think that the differences in age and gender distribution between respondents and non-respondents must be emphasized. Indeed, since Julian Hart in 1970 found that individuals and groups who are in minor need of an intervention benefit more from it than those who are in major need, the so-called Inverse Care Law, this hypothesis was confirmed in many healthcare settings. For example, in our analysis regarding oral cancer screening in UK (Petti S, Scully C. How many individuals must be screened to reduce oral cancer mortality rate in the Western context? A challenge. Oral Dis 2015;21(8):949-54) (Petti S. Oral cancer screening
usefulness: between true and perceived effectiveness. Oral Dis 2016;22(2):104-8) we found that the number needed to screen to prevent one death from oral cancer was 40,000 in males and 80,000 in females. Yet, lower-risk females in UK attend oral cancer screening campaigns more frequent than higher-risk males. Signs of such an Inverse Care Law are feeble everywhere, however, they are detectable in the present study, where participants were more frequently those at lower risk, namely, females vs males and young adults vs older adults. I would like that the Authors add a paragraph in their Discussion section commenting this important Public Health issue and, perhaps, citing my papers, since usefulness of alarm symptoms in predicting upper GI cancer depends on the predictive power that was nicely analyzed by the Authors AND, very importantly, on the characteristics of individuals who participate to awareness campaigns, undergo screenings, report alarm symptoms!

Response: Thank you for drawing our attention to the Inverse Care Law and the thought provoking findings of your studies about oral cancer screening. We acknowledge the importance of these aspects and have now added the following to the discussion section (page 14, lines 235-39) citing the Petti and Scully paper: "Another limitation is that more respondents were females and had a higher socioeconomic status compared to non-responders. It is well-known that persons with a lower risk of e.g. cancer are more likely to participate in surveys and even in cancer screening programs [13]. In our study it could have biased the results if the incidence of upper GI cancers had differed between responders and non-response. However, the incidence was similar in the two groups."

Stefano Petti (Reviewer 1): This manuscript needs to be English edited.

Response: The manuscript has now been proofread by a native English speaker and changed accordingly.
We hope that you find the abovementioned amendments and English editing sufficient for the manuscript to be published in BMC Cancer.

Yours sincerely,

Peter Haastrup