Reviewer’s report

Title: The association between daily concentrations of air pollution and visits to a psychiatric emergency unit: A case-crossover study

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Reviewer: Jutta Lindert

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Review

The association between daily concentration of air pollution and visits to a psychiatric emergency unit: A case-crossover study

The topic itself is very interesting. It will need much more research in the future.

I have the following questions:

Abstract

I would propose to be a bit more cautious as we are not sure whether air pollution is affecting mental health and not "how it is affecting mental health". What is meant by mental health? What are mental health problems? It would be clearly distinguish between mental health (as a positive state), mental health problems (please define) and mental disorders.

Was there an association or "seemed to be an association?"

Introduction

Please specify and clarify what you mean by "Mental Health". Mental Health is defined as a positive state of mind. I wonder why in the first sentence authors speak about mental health and in the second sentence about depression. Please clarify whether you mean depression or mental health. Do you mean "mental health problems" of mental disorders?

Methods/Results

Methods and results are well described, however language should be checked by a native speaker. Did you conduct a sample size calculation? The results are marginally significant -I
would be interested in power calculations. Likewise maybe an sensitivity analyse according to diagnoses could b done?

Discussion

Please discuss limitations of the study. Please specify what you mean with "warm weather". Higher temperatures have been associated in other studies with increases in some mental disorders. Could the change in temperature be a further possibility of explanation? The limitations of this study using routine data should be clarified.

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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