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## BMJ Open Press Release

### **'Worried well' may be boosting their risk of heart disease**

*Potential consequences of health anxiety underlines need to treat it, say researchers*

People who needlessly worry that they have, or will develop, serious illness—popularly referred to as 'the worried well'—may be boosting their risk of developing heart disease, suggests research published in the online journal **BMJ Open**.

Anxiety is a known risk factor for heart disease. And health anxiety, which describes persistent preoccupation with having or acquiring a serious illness, and seeking prompt medical advice, on the basis of misattributed bodily symptoms in the absence of any physical disease, seems to be no exception, say the researchers.

And as such, it needs to be taken seriously and treated properly, they suggest.

They base their findings on 7052 participants of the Norwegian Hordaland Health Study (HUSK), a long term collaborative research project between the National Health Screening Service, the University of Bergen, and local health services.

The participants, all of whom were born between 1953 and 1957, filled in two questionnaires about their health, lifestyle, and educational attainment. And they had a physical check-up,

consisting of blood tests, weight, height, and blood pressure measurements, taken between 1997 and 1999.

Levels of health anxiety were assessed using a validated scale (Whiteley Index), comprising 14 items scored from 1-5. Those (710) whose total score amounted to 31 or more were in the top 10% of the sample and considered to have health anxiety.

The heart health of all the participants was subsequently tracked using national data on hospital treatment episodes and death certification up to the end of 2009.

Anyone who received treatment for, or whose death was linked to, coronary artery disease occurring within a year of entering the study, was excluded, on the grounds that they might already have been ill.

In all, 234 (3.3%) of the entire sample had an ischaemic event—a heart attack or bout of acute angina—during the monitoring period, with the average time to the first incident just over 7 years.

But the proportion of those succumbing to heart disease was twice as high (just over 6%) among those who displayed health anxiety as it was among those who didn't (3%).

While established risk factors for heart disease explained part of the association found, health anxiety was still linked to a heightened risk, after taking account of other potentially influential factors.

Those with health anxiety at the start of the study were 73% more likely to develop heart disease than those who weren't in this state of mind, the analysis showed. And the higher the Whiteley Index score, the greater was the risk of developing heart disease.

This is an observational study, so no firm conclusions can be drawn about cause and effect, added to which the researchers admit that health anxiety often exists alongside other mental

health issues, such as general anxiety and depression, making it hard to differentiate.

But the findings back current thinking on the potentially harmful effects of anxiety on health, they say.

“[Our research] further indicates that characteristic behaviour among persons with health anxiety, such as monitoring and frequent check-ups of symptoms, does not reduce the risk of [coronary heart disease] events,” they write.

If anything, putting the body on a permanent state of high alert may have the opposite effect, they suggest.

“These findings illustrate the dilemma for clinicians between reassuring the patient that current physical symptoms of anxiety do not represent heart disease, contrasted against the emerging knowledge on how anxiety, over time, may be causally associated with increased risk of [coronary artery disease],” they conclude.

The findings “underline the importance of proper diagnosis and treatment of health anxiety,” they add.

[Ends]

### **Notes for editors**

**Research:** Health anxiety and risk of ischaemic heart disease: a prospective cohort study linking the Hordaland Health Study (HUSK) with the Cardiovascular Diseases in Norway (CVDNOR) project

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