

Original Research Reports

Cyberchondria: Parsing Health Anxiety From Online Behavior



Emily R. Doherty-Torstrick, Ph.D., Kate E. Walton, Ph.D., Brian A. Fallon, M.D., M.P.H.

Background: *Individuals with questions about their health often turn to the Internet for information about their symptoms, but the degree to which health anxiety is related to online checking, and clinical variables, remains unclear. The clinical profiles of highly anxious Internet checkers, and the relationship to checking behavior itself, have not previously been reported.*

Objective: *In this article, we test the hypothesis, derived from cognitive-behavioral models, that individuals with higher levels of illness anxiety would recall having experienced worsening anxiety after reassurance-seeking on the Internet. **Method:** Data from 731 volunteers who endorsed engaging in online symptom-searching were collected using an online questionnaire. Severity of health anxiety was assessed with the Whiteley Index, functional impairment with the Sheehan Disability Scale, and distress recall during and after searching with a modified version of the Clinician's Global Impairment scale. Multiple regression analyses were conducted to*

*determine variables contributing to distress during and after Internet checking. **Results:** Severity of illness anxiety on the Whiteley Index was the strongest predictor of increase in anxiety associated with, and consequent to, online symptom-searching. Individuals with high illness anxiety recalled feeling worse after online symptom-checking, whereas those with low illness anxiety recalled relief. Longer-duration online health-related use was associated with increased functional impairment, less education, and increased anxiety during and after checking. **Conclusion:** Because individuals with moderate-high levels of illness anxiety recall experiencing more anxiety during and after searching, such searching may be detrimental to their health. If replicated in controlled experimental settings, this would suggest that individuals with illness anxiety should be advised to avoid using the Internet for illness-related information.*

(Psychosomatics 2016; 57:390–400)

Key words: cyberchondria, health anxiety, hypochondriasis, illness anxiety, internet symptom-searching, functional impairment.

Cyberchondria is a term used to refer to searching the web excessively for health care information.¹ More recently, it was defined as a pattern of excessive and repetitive behavior of symptom-checking on the Internet and purported to be related to underlying health anxiety and nonreassurability²; this is a concept not yet investigated in an Internet population. A recent follow-up perspective³ highlighted the need to parse the relationship of health anxiety from that of online symptom-checking behavior. This is a concerning subject given that approximately 89% of American^{4–6} and 75% of international web users² search for health information online.

Supported in part by an NIH grant to Dr. Fallon (RO1MH071456) and by the New York State Psychiatric Institute, NYC NY/USA.

Previously presented in part as a poster at the American Psychological Association annual conference, Honolulu HI/USA, July 2013.

Received August 26, 2015; revised January 30, 2016; accepted February 1, 2016. From Department of Psychology, St. John's University, Queens, NY (ERDT, KEW); Department of Psychiatry, Columbia University, New York City, NY (BAF). Send correspondence and reprint requests to Emily R. Doherty, Ph.D., Department of Psychology, St. John's University, 8000 Utopia Parkway, Jamaica, NY 11439; e-mail: DohertyPhD@gmail.com, Emily.Doherty09@StJohns.edu

© 2016 The Academy of Psychosomatic Medicine. Published by Elsevier Inc. All rights reserved.

Health anxiety is a term for mild-severe presentations of illness worries, reported among 19.8% of patients attending British specialty clinics,⁷ and 3.4% of Australians in a large community survey.⁸ About 4–6% of patients in American primary care samples^{9,10} exhibit pathologic levels of illness worry of sufficient severity to meet criteria for the DSM-IV diagnosis of hypochondriasis.¹¹ Although hypochondriasis itself as a diagnosis was removed from DSM-5,¹² health anxiety now forms a central feature of both Illness Anxiety Disorder and Somatic Symptom Disorder.

Concern about illness—regardless of actual presence of illness—has been found to predict increased ratings of disability, help-seeking behavior, and number of somatic symptoms reported.¹³ Health worry is also associated with attentional bias to illness-related stimuli in both clinically-hypochondriacal populations¹⁴ and in nonclinical populations with baseline somatic preoccupations,¹⁵ even after controlling for state anxiety.

Additionally, the Internet as an informational medium may exert uniquely effective pressure on those with health anxiety. Information from the web is often of unregulated accuracy,¹⁶ where benign symptom inquiry into a search engine is likely to return a disproportionately high rate of statistically unlikely explanations, such as a life-threatening illness.⁶ In general, users are unlikely to be skeptical about the quality of information obtained¹⁷ or attend to base rates of illnesses.¹⁸ Those with worries about illnesses are even less likely to attend to source validity¹⁹ and are more frightened of what they see.²⁰ Further, moderate levels of anxiety and increased checking within nonclinical samples have been found to be related to increased number of medical appointments,²¹ increased likelihood of feeling “frightened” of health-related online information,²⁰ and worsening of health anxiety.²²

Excessive checking behavior is also related to health anxiety. A study, with a large number of participants, reported illness concern as “escalated” over time during Internet health searches⁶; however, this Internet study did not use psychometrically-validated clinical instruments, making it unclear how to evaluate the severity of illness anxiety or a change in anxiety with Internet usage and making it challenging to compare with other published studies. Other data suggest “pathological Internet use” is

associated with increased reassurance-seeking behavior.²³ As reassurance seeking in obsessive-compulsive disorder increases distress rather than reduces it,^{24,25} cognitive-behavioral models now posit that reassurance-seeking is a maintaining factor in health anxiety^{7,26}; based on these models, we hypothesized that high levels of illness anxiety would predict a recall of worsened anxiety during and after symptom-checking on the Internet.

Research related to these lines of inquiry has been somewhat limited by the use of a primarily college-aged sample—a research approach the scientific community has more recently questioned²⁷—and by the use of a healthy rather than a more severely ill sample of individuals with illness anxiety. Despite the many negative emotional and behavioral consequences associated with clinically severe levels of illness anxiety and the widespread use of the Internet, there is a dearth of information about the effect of the Internet upon these individuals. The present study was conducted to begin to address this gap in the literature, using an Internet population.

METHODS

This survey, entitled “Cyberchondria: a survey for people who check symptoms online,” was posted online from 2008–2012. This 19-item survey was developed by the authors and approved by the Institutional Review Board of the New York State Psychiatric Institute.

Aims

We hypothesized that higher illness anxiety measured continuously with the Whiteley Index (WI) would predict a recall of increased anxiety both during and after symptom-checking on the Internet. Similarly, when the WI was assessed dichotomously, we predicted that individuals with high illness anxiety would recall greater anxiety during and after Internet checking than those with low levels of illness anxiety. Our null hypothesis was that illness anxiety would not be associated with a recall of worsening anxiety at either time point. Our secondary hypothesis was that high illness anxiety among Internet health information-seekers would be associated with greater functional impairment. Finally, an additional aim of this study was to characterize the participants who reported high

Download English Version:

<https://daneshyari.com/en/article/337323>

Download Persian Version:

<https://daneshyari.com/article/337323>

[Daneshyari.com](https://daneshyari.com)