



A Study on Cyberchondria and Health Anxiety among Young Adult Females

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Abstract

The association between excessive online searches on the internet for health-related information among young adult females is well established. Agony and curiosity to detect the cause of the physical symptoms may prompt a health-anxious adult to surf the internet to eliminate the possibility of any serious medical condition. A substantial body of research shows that hypochondriac adults who seek the help of the internet for their symptoms may end up becoming more distressed after the search and develop obsessive and reassuring behaviour termed cyberchondria. The current research aims to study the correlation between health anxiety and cyberchondria among young adult females. Standardized scales were used to measure the severity of health anxiety and cyberchondria. A study was conducted on 41 female participants between the age of 18- 25 years. The results found a significant positive correlation between health anxiety and cyberchondria. Although; the evolution in the field of science and technology has many pros in this modern era including the privilege to access the world wide web; when it comes to health-related issues, it is always recommended to consult a medical professional to prevent misdiagnosis and its negative consequences.

Keywords: Cyberchondria, health anxiety, hypochondria, internet, young adult, female.

Introduction

“There is some really good health information available online but not all sources are high quality or reliable. It’s worth carefully considering who authored the information. You also need to be careful that you aren’t misinterpreting information, or just considering the worst possible diagnosis. The best step is to go to your GP for any information and concerns you have. Then together you can discuss your symptoms and health needs and decide on the best course of treatment.” –Dr Sue

Hypochondria or health anxiety is a medical condition in which an individual becomes so hyper-aware of the body sensations that they spend time in their head analysing symptoms and figuring out what illness it belongs to, they become so anxious that their body starts making up symptoms that match a disease process they are worried about. With health anxiety, one comes to associate the feeling of anxiety with a physical sensation and eventually learns to fear the physical symptoms, further viewing it as dangerous assuming that any health problem one has is catastrophic or permanent. A person diagnosed with hypochondria may believe that there’s some hidden undiscovered problem that medical science hasn’t been able to detect. Cyberchondria is anxiety induced by escalation during the online search to review morbid or serious content. Humans are vigilant about all the things happening in their bodies and have the propensity to review the worst possible case scenario probably to dismiss it using the internet. Search on the internet is based on a frequency model, things that are frequently clicked are those things that rise to the top of the search results, however, people click on the worst-case scenario which gets driven up on search rankings. Thus, if a person browses any body sensation, searches may misdiagnose them with serious medical conditions like cancer, tumour or heart attack which further reinforces them to spend more time on the internet resulting in cyberchondria.

A study was conducted on 731 volunteers who endorsed engaging in online symptom searching. The extent of online symptom checking and severity of health anxiety was evaluated. The results found that individuals with low illness anxiety recalled relief whereas individuals with moderate to high levels of illness anxiety experienced more anxiety during and after searching symptoms online and advised people belonging to the latter category to avoid using the internet for illness-related information (Walton et al., 2016).

A study was conducted to explore health-anxious individuals’ experiences of searching for health information online. The results found that participants sought health information online to decide a strategy to solve their problem, to feel better by having done something about it or to share similar experiences. The participants were aware that information is sometimes inaccurate or irrelevant and used strategies to filter and validate information (McManus et al., 2014).

A study was conducted among community adults in the United States with no current reported medical problems. The results indicate that cyberchondria is possibly discernible from health anxiety and obsessive-compulsive symptoms, providing insights into areas of potential overlap (Fergus & Russell, 2015).

Cyberchondria

“Cyberchondria is a dysfunctional behavioural pattern characterized by an excessive and anxiety-amplifying engagement in searching for reassuring health information on the internet” (Santoro et al., 2022).

“Cyberchondria refers to a time-consuming activity over which there is little or no perceived control” (Starcevic et al., 2020).

In a study done by Starcevic & Berle (2014), it was found that several people who are overly distressed or anxious about their health perform excessive or repeated health-related searches on the internet as a form of reassurance seeking, only to become more frightened or distressed, termed here as cyberchondria.

A study was conducted on 515 individuals' health-related search experiences. The results found that web search engines have the potential to escalate medical concerns by the amount and distribution of medical content viewed, the presence of escalatory terminology in pages visited and a user's predisposition to escalate verses to seek more reasonable explanations for ailments. It also demonstrated the persistence of post-session anxiety and suggested actionable design implications for improving the search and navigation experience for people turning to the web to interpret symptoms (White & Horvitz, 2009).

A review study was conducted by Aiken & Kirwan (2012) where research journals from 2000-2011 were analysed. The results found that knowledge, empowerment (Bastian, 2003), support, reassurance (Sillence & Briggs, 2007) and altruism (Adar & Huberman, 2000) may be positive aspects regarding medical search online, however, the literature (Belling, 2006; Lewis, 2006; Ravdin, 2008; White & Horvitz, 2009) indicates that anxiety is likely to be a consequence of same.

Health Anxiety

“Health anxiety occurs when perceived bodily sensations are interpreted as symptoms of a serious disease” (Asmundson et al., 2019).

“Hypochondriasis or hypochondria is a condition in which a person is excessively and unduly worried about having a serious illness” (Berrios, 2001).

A review study was conducted by Asmundson et al. (2010). The results found that severe health anxiety has significant negative impacts on well-being, social and occupational functioning and healthcare resource utilization.

A review study conducted by Tyler (2018), found that the prevalence of health anxiety may be increasing due to excessive internet browsing. It highlighted some treatment methods like antidepressants, cognitive behaviour therapy, mindfulness training and acceptance and commitment therapy which proved efficacious in both the short and longer term.

A study was conducted on 192 participants varying in subclinical levels of health anxiety. The results found that health-anxious individuals regarded themselves as at greater risk for disease overall and attached greater accuracy to health-related information. It also concluded that health anxiety did not result in cognitive or behavioural avoidance of illness information (Hadjistavropoulos et al., 1998)

Purpose

The purpose is to study the correlation between health anxiety and cyberchondria in young female adults prompting excessiveness, distress, reassurance and compulsive behaviour on online searches.

Hypothesis

There will be a positive correlation between cyberchondria and health anxiety.

Method

Sample

A total of 41 young female adults aged between 18 to 25 years participated from across Mumbai city and Thane district.

Measures

Cyberchondria Severity Scale (CSS-12) developed by McElroy & Shevlin (2014), consists of 12 items that are scored on a 5-point Likert-type scale (ranging from 1=never to 5=always). It is used as a measure of cyberchondria consisting of excessiveness, distress, reassurance and compulsion as subscales.

Short Health Anxiety Inventory (SHAI) developed by Salkovskis et al. (2002), consists of 18 items, each scored on a 4-point Likert-type scale. It is used as a measure of health anxiety.

Procedure

The participants were given information about the purpose of the research. The data collection of the sample and the questionnaires were filled out via a google form. Each participant was thanked for their efforts and cooperation. Standardized Psychological Tests were administered to the participants.

Analysis of Data

Results

The responses of participants were analysed using the correlation between health anxiety and cyberchondria with sub-variables. Mean and standard deviation data is presented in table 1 whereas table 2 shows the correlation between health anxiety and cyberchondria including sub-variables like excessiveness, distress, reassurance and compulsion.

Table 1 shows N, Mean and Standard Deviation

	Cyberchondria	Excessiveness	Distress	Reassurance	Compulsion	Health anxiety
N	41	41	41	41	41	41
Mean	28.9	8.71	7.54	6.24	6.15	15.0
Standard deviation	10.4	3.13	3.43	3.00	2.86	7.88

Table 2 shows the correlation between health anxiety and cyberchondria along with sub-variables- excessiveness, distress, reassurance and compulsion.

	Cyberchondria	Excessiveness	Distress	Reassurance	Compulsion	Health anxiety
Cyberchondria	—					
Excessiveness	0.874 ***	—				
Distress	0.843 ***	0.723 ***	—			
Reassurance	0.762 ***	0.601 ***	0.468 **	—		
Compulsion	0.841 ***	0.630 ***	0.673 ***	0.538 ***	—	
Health anxiety	0.479 **	0.351 *	0.415 **	0.423 **	0.339 *	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion of Results

The results found that there is a significant positive correlation between cyberchondria and health anxiety ($r=0.479$, $p<.01$). Hence, the hypothesis that health anxiety will be positively correlated to cyberchondria is accepted. The result also found a significant positive correlation between health anxiety and excessiveness ($r=0.351$, $p<.05$), a positive correlation between health anxiety and distress ($r=0.415$, $p<.01$), a significant positive correlation between health anxiety and reassurance ($r=0.423$, $p<.01$), following a significant positive correlation between health anxiety and compulsion ($r=0.339$, $p<.05$).

A study was conducted on 539 community adults located in the United States. The results found that cyberchondria and health anxiety are significantly correlated. The results also found that distress and excessiveness correlated significantly and more strongly than obsessive-compulsive symptoms (Fergus, 2014), further studies conducted on 255 university students also found out positive correlation between the frequency of health-related searching on the internet and health anxiety indicating reassuring behaviour (Singh & Brown, 2014).

Conclusion

The research study gave insights into cyberchondria and its relationship with health-anxious adults. A significant positive correlation found between health anxiety and cyberchondria might be a result of an obsession with self-diagnostic searches on the internet. The study also reveals a significant positive correlation between health anxiety and excessiveness, distress, reassurance and compulsive behaviour which depicts that a person suffering from hypochondria might choose to browse health issues online as a result of excessiveness, distress, in the form of reassurance and compulsion and might end up getting overwhelmed with the results.

Various approaches can be adopted to keep away from the negative effects of browsing on hypochondriac adults. A young adult suffering from health anxiety must be made aware of the nature of the health information available online by considering the factor of search engine which displays and ranks the site which is most clicked propelling negative results to show up at the top. A hypochondriac young adult must consider the probability of developing a serious illness by looking into factors like heredity, weight, stress, the amount of physical activity etc., usually it is less likely for a young adult to develop a serious medical condition. It is always adequate to consult medical professionals and believe their diagnosis.

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