A Review on Cyberchondria Based on Bibliometric Analysis

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Abstract : Background: Cyberchondria, as an "emerging risk" accompanied by the information era, is a new abnormal pattern characterized by excessive or repeated online searches for health-related information and escalating health anxiety, which endangers people's physical and mental health and poses a huge threat to public health. Objective: To explore and discuss the research status, hotspots and trends of Cyberchondria. Methods: Based on a total of 77 articles regarding "Cyberchondria" extracted from Web of Science from the beginning till October 2019, the literature trends, countries, institutions, hotspots are analyzed by bibliometric analysis, the concept definition of Cyberchondria, instruments, relevant factors, treatment and intervention are discussed as well. Results: Since "Cyberchondria" was put forward for the first time in 2001, the last two decades witnessed a noticeable increase in the amount of literature, especially during 2014-2019, it quadrupled dramatically at 62 compared with that before 2014 only at 15, which shows that Cyberchondria has become a new theme and hot topic in recent years. The United States was the most active contributor with the largest publication (23), followed by England (11) and Australia (11), while the leading institutions were Baylor University(7) and University of Sydney(7), followed by Florida State University(4) and University of Manchester(4). The WoS categories "Psychiatry/Psychology " and "Computer/ Information Science "were the areas of greatest influence. The concept definition of Cyberchondria is not completely unified in the world, but it is generally considered as an abnormal behavioral pattern and emotional state and has been invoked to refer to the anxiety-amplifying effects of online health-related searches. The first and the most frequently cited scale for measuring the severity of Cyberchondria called "The Cyberchondria Severity Scale (CSS) "was developed in 2014, which conceptualized Cyberchondria as a multidimensional construct consisting of compulsion, distress, excessiveness, reassurance, and mistrust of medical professionals which was proved to be not necessary for this construct later. Since then, the Brazilian, German, Turkish, Polish and Chinese versions were subsequently developed, improved and culturally adjusted, while CSS was optimized to a simplified version (CSS-12) in 2019, all of which should be worthy of further verification. The hotspots of Cyberchondria mainly focuses on relevant factors as follows: intolerance of uncertainty, anxiety sensitivity, obsessive-compulsive disorder, internet addition, abnormal illness behavior, Whiteley index, problematic internet use, trying to make clear the role played by "associated factors" and "anxiety-amplifying factors" in the development of Cyberchondria, to better understand the aetiological links and pathways in the relationships between hypochondriasis, health anxiety and online health-related searches. Although the treatment and intervention of Cyberchondria are still in the initial stage of exploration, there are kinds of meaningful attempts to seek effective strategies from different aspects such as online psychological treatment, network technology management, health information literacy improvement and public health service. Conclusion: Research on Cyberchondria is in its infancy but should be deserved more attention. A conceptual consensus on Cyberchondria, a refined assessment tool, prospective studies conducted in various populations, targeted treatments for it would be the main research direction in the near future.

Keywords : cyberchondria, hypochondriasis, health anxiety, online health-related searches