

Chapter 13

Is There an Increased Risk of Cyberchondriasis Post ChatGPT Era?

A Conceptual Model With Precipitating, Predisposing, and Maintaining Factors

ABSTRACT

Technology advancements have given people the ability to research health topics online and do self-diagnostics. Cyberchondria is a clinical occurrence wherein recurrent online searches for medical information lead to heightened anxieties regarding one's physical well-being. The AI-powered language model ChatGPT, created by OpenAI, can produce text that sounds like human speech depending on context and previous interactions. Therefore, there is a tremendous increase in use of generative AI such as ChatGPT in assessing their own health condition which may result in an increase in the prevalence of Cyberchondriasis. The objective of the current study is to understand the precipitating, predisposing, and maintaining factors in the results of using ChatGPT in self-diagnosis. The results develop a conceptual model using a psychosocial model and use literature to observe its relevance.

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BACKGROUND

The escalating prevalence of cyberchondria is becoming an increasingly worrisome issue (Mestre-Bach & Potenza, 2023). In July 2022, a cross-sectional study on cyberchondria prevalence was carried out among BSc Computer Science students at Sri Sathya Sai Baba Degree College in Anantapuramu, Andhra Pradesh. The findings indicated a cyberchondria prevalence rate of 22.5%. Among the various constructs examined, excessiveness emerged as the dominant factor (mean \pm standard deviation [SD]: 3.36 ± 2.091), followed by distress, compulsion, and reassurance (mean \pm SD: 2.48 ± 2.493) (Kulsum et al., 2023). Another research uncovered a notable occurrence of cyberchondria within the Saudi population, and this was found to be linked with both smartphone addiction ($r = 0.395$, $CI = 0.316/0.475$, $P = 0.0001$) and elevated eHealth literacy levels ($r = 0.265$, $CI = 0.182/0.349$, $P = 0.0001$) (El-Zayat et al., 2023). ChatGPT has been introduced in November 2022. Since the launch of ChatGPT, the social influence has made the application utilization on a large scale population. It is being used by students, teachers, researchers, adolescents, adults and people who have literacy to use internet. The increase in use of ChatGPT has raised psychological issues that a population may face in the future. The objective of the current study is to identify factors that may increase the risk of cyberchondriasis in a general population.

PSYCHOSOCIAL MODEL

A conceptual systems framework such as the psychosocial model has been discussed in various research strategies. For example, psychosocial factors on the trajectory of child/adolescent mental health problems (CAMHP) over time were discussed by Daniel Fatori et al., 2013 (D. et al., 2013). Cyberchondria has been discussed in various psychological models. Matteo Vismara et al., discussed the systematic review of psychological models and mechanisms associated with cyberchondria (CYB), relationships between CYB and mental disorders and prevention and treatment strategies (Vismara et al., 2020). Zheng et al., in 2020 has published an important theoretical model including psychosocial factors that illuminates the processes of cyberchondria development among individuals who are anxious about their health (Zheng et al., 2021).

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