


## Chapter 6

# Cyberchondria and Medical Student Syndrome: An Anxious Path to Be an Anxiety Healer?

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### ABSTRACT

*Health anxiety is a disorder that can be very distressful and cause unnecessary examinations. A doctor is expected to handle health anxiety in terms of examination, diagnosis, therapy, and counselling processes. To provide optimal patient counselling, a doctor needs confidence, empathy, and good mental health. However, the process to become a medical doctor requires a student to read through a large amount of medical information, which arguably might induce “medical student’s syndrome,” or health anxiety. Contradicting research findings exist about such conditions, however, most of them use traditional measures of health anxiety and do not consider students’ online behaviour. The authors hypothesized that a medical student is susceptible to cyberchondria, a form of health anxiety due to excessive internet use. Some studies have shown that there may be higher cyberchondria scores among medical students compared to the general population. Cyberchondria needs to be studied further to improve the mental health condition of medical students and to provide optimal future healthcare for patients.*

### INTRODUCTION

One of the key elements in preventing and managing cyberchondria, a relatively new term meaning anxiety characterized by excessive internet search about health (Mc Elroy & Shevlin, 2014), is arguably engaging in communication with medical professionals. The Cyberchondria Severity Scale created in 2014 addresses this issue, as it contains the subscale of “Mistrust toward medical professionals.” The items in this subscale are items no. 9, 28, and 33 as follows:

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9. I take the opinion of my GP/medical professional more seriously than my online medical research
28. I trust my GP/medical professional's diagnosis over my online self-diagnosis
33. When my GP/medical professional dismisses my online medical research, I stop worrying about it

The questionnaire suggests that prioritizing online medical research and self-diagnosis over medical professional opinion contributes to cyberchondria. It might also imply the reverse causality, i.e., believing in health professionals may lower health anxiety due to online research. However, this opinion is not without opposition, as several follow-up researches suggest that the “mistrust” subscale needs to be removed due to poor factor loading (Fergus, 2014; Norr et al., 2015).

Despite the conflicting arguments, a physician is always expected to have a good communication skill. Most patients expect the physician to answer their questions with the language they understand, respond to their necessity attentively, and provide a holistic care (Nepal et al., 2020). To answer such expectation, the physician needs to be able to communicate effectively while staying calm and logical.

However, a physician's skill is not acquired from birth. Obtaining these skills requires hard and stressful work through the medical faculty. Instead of becoming a calm and soothing individual, the study process frequently causes burnout, stress, and many psychiatric disorders. The student is required to learn about various kinds of diseases from conflicting online and offline literatures. Exposure to large number of materials and stress might arguably predispose medical students to health anxiety and cyberchondria. Therefore, to optimally manage cyberchondria in the population, it is important to discuss health anxiety in medical students. Medical students were historically known to be particularly worried about contracting diseases, which some authors conceptualized as “Medical student syndrome.” This chapter will discuss “medical student syndrome” and its possible correlation with cyberchondria.

## **HISTORY OF MEDICAL STUDENT SYNDROME**

“Medical student syndrome” is a term that has been used for some time. The term was mentioned by various journals, for example in article by Hardy and Calhoun (1997), although the condition has been mentioned by earlier sources under different names as early as 20th century, i.e., nosophobia, medical students' disease and hypochondriasis. Probably, the oldest mention about this condition was by neurologist George Lincoln Walton, which mentioned that medical students repeatedly consulted doctors about the assumption that they have the disease they were studying. Walton suggested that, because the students knew the anatomical location of a diseased organ, they became overly sensitive over harmless sensation in nearby areas. The research in this area resurfaced in 1960s and regained popularity several times in history, but until now, there has never been full agreement about the condition or a good solution (Hunter et al., 1964; Walton, 1908; Collier, 2008).

Various definitions of medical student syndrome exist, but it generally means health anxiety induced by the process of medical study. It was thought that the combination of a large amount of work pressure and medical knowledge might cause the medical students to have enhanced physical sensation due to autonomic activation which is then wrongly attributed to medical illness (Waterman & Weinman, 2014).

The condition has been discussed across time, with some authors suggesting that medical student syndrome is real, while others believed that medical students are no more anxious than other students and that physicians may misunderstand prevalence due to strong impressions formed by individual

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