

## Chapter 2

# Cyberchondria, Coronavirus, and Cybercrime: A Perfect Storm

**Mary Aiken**

*University of East London, UK*

**Ruby Farr**

*University of East London, UK*

**Doug Witschi**

*Interpol, Singapore*

### ABSTRACT

*Humans are adapting to and increasingly relying on technology particularly in times of global crisis. As online audiences increase, so does the risk of cybercrime. The impact of the COVID-19 pandemic is discussed in the context of health anxiety, the infodemic and cyberchondria, along with cybercriminal exploitation of pandemic-induced human anxiety and psychological vulnerability. Health anxiety, uncertainty, social isolation, changes to work-life practices, information seeking, mistrust of public health organisations, and the spread of false information all arguably intersect – leading to a global state of human vulnerability and therefore presenting opportunities for cybercriminals. There is a requirement for global agencies such as the United Nations, the WHO, INTERPOL, and governments to take action. Police agencies worldwide need to extrapolate learnings regarding the current pandemic and attendant increase in cybercrime and based on those findings move to form a global coalition with industry partners to investigate, predict, and prevent a potential future cybercrime pandemic.*

## **INTRODUCTION**

The global online audience is currently estimated to be over five billion (Internet World Stats, 2021). Humans are adapting to and relying on technology more than ever before, using the Internet daily for shopping, connectivity, communication, work, entertainment, and, importantly, for information. Whilst the benefits of technology are well established, accessibility to certain content online and associated engagement can present risk of harm. As online audiences increase, so does the prevalence of cybercrime and attacks in cyberspace. This chapter will consider health anxiety and cyberchondria in the context of the COVID-19 pandemic, along with cybercriminal exploitation of pandemic induced human anxiety and associated psychological vulnerability.

### **Anxiety, Hypochondria, and Cyberchondria**

The prevalence of hypochondriasis has been reported as 4–9% in the general population (Carson et al., 2000). However, a new distinct cohort has emerged of those who experience anxiety when conducting health-related searches online. This is known in the field of cyberpsychology as cyberchondria. The phenomenon of cyberchondria reflects a pattern of excessive health-based search behaviours that are likely to increase health anxiety or distress, heightened by the ever-increasing access to, and normalisation of, technology use and the Internet specifically (Starcevic & Berle, 2013; Starcevic, 2020). The concept of cyberchondria has also been described as being closely related to forms of technology-related health anxiety, a “*clinical phenomenon in which repeated Internet searches regarding medical information result in excessive concerns about physical health*” (Mathes et al., 2018, p. 204). Research supports the contention that online health-related searches can lead to an escalation of search behaviour and anxiety (White & Horvitz, 2009). There is a relationship between health anxiety and hypochondria (Asmundson et al., 2001), and health-related searches online can lead to anxiety; therefore, arguably there is a relationship between anxiety, hypochondria, and cyberchondria.

*The Internet is a source of useful medical information. Intuitive diagnostic websites, such as Webmd.com and Diagnose-me.com, may shed some light on symptoms that concern people. However, ‘caveat quaeor’ – let the searcher beware: the use of the web for self-diagnosis may increase anxiety in people who have no training in the health professions. (Aiken et al., 2012, p.71)*

It is widely accepted that we are now in the digital age, we are increasingly living, working, and socialising in an unique and continuously evolving environment described as cyberspace (Aboujaoude & Starcevic, 2015; Bayem, 2015) and described as follows, a global domain within the information environment consisting of the interdependent networks of information technology infrastructures and resident data including the Internet, telecommunications networks, computer systems along with embedded processors and controllers. (Homeland Security Digital Library, 2021)

### **Health Literacy and Health Behaviours**

Almost a decade ago Yan (2012) predicted the exponential growth of the cyber behavioural sciences, noting the unprecedentedly pervasive and profound influence of the Internet on human beings. The global domain of the Internet, which constitutes cyberspace, has been described as an immersive and

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