Vulnerabilities to misinformation in online pharmaceutical marketing

1. Julian De Freitas
2. Brian A Falls
3. Omar S Haque
4. Harold J Bursztajn

1. 1Department of Psychology, Yale University, New Haven, CT 06520, USA
2. 2Department of Psychiatry, Harvard Medical School, VA Boston Healthcare System, Boston, MA 02169, USA
3. 3Program in Psychiatry and the Law, Harvard Medical School, Boston, MA 02138, USA
4. 4Department of Psychiatry, Program in Psychiatry and the Law at BIDMC Psychiatry of Harvard Medical School, Boston, MA 02138, USA

1. Correspondence to: Harold J Bursztajn. Email: harold_bursztajn@hms.harvard.edu

Abstract

Given the large percentage of Internet users who search for health information online, pharmaceutical companies have invested significantly in online marketing of their products. Although online pharmaceutical marketing can potentially benefit both physicians and patients, it can also harm these groups by misleading them. Indeed, some pharmaceutical companies have been guilty of undue influence, which has threatened public health and trust. We conducted a review of the available literature on online pharmaceutical marketing, undue influence and the psychology of decision-making, in order to identify factors that contribute to Internet users’ vulnerability to online pharmaceutical misinformation. We find five converging factors: Internet dependence, excessive trust in the veracity of online information, unawareness of pharmaceutical company influence, social isolation and detail fixation. As the Internet continues to change, it is important that regulators keep in mind not only misinformation that surrounds new web technologies and their contents, but also the factors that make Internet users vulnerable to misinformation in the first place. Psychological components are a critical, although often neglected, risk factor for Internet users becoming misinformed upon exposure to online pharmaceutical marketing. Awareness of these psychological factors may help Internet users attentively and safely navigate an evolving web terrain.