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Evaluating patients' perspectives on social media: The importance of clearly reporting data search, cleaning, and processing

DR Katja Reuter, PhD^{1,2} and Delphine Lee, MD, PhD^{3,4}

¹Southern California Clinical and Translational Science Institute, Keck School of Medicine, University of Southern California, Los Angeles, California, United States

²Institute for Health Promotion and Disease Prevention Research, Department of Preventive Medicine, Keck School of Medicine, University of Southern California, Los Angeles, California, United States

³Division of Dermatology, Department of Medicine, Harbor-UCLA Medical Center, Torrance, California, United States

⁴Los Angeles Biomedical Research Institute, Torrance, California, United States

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Letter to the Editor

We read the recent report by Menzies and colleagues in the *British Journal of Dermatology* with great interest. The authors described commonly discussed and personal patient experiences of psoriasis treatment on the social network Twitter¹. While the authors cogently describe their findings, there were a few points in methodology which should be included in this type of social media research. First, it is unclear how the authors reliably identified tweets from patients. Social media is a pool for commercial and bot-like content². Bots ("robots") are purely automated accounts or human-assisted automated accounts ("cyborgs"). The authors did not discuss whether and how they controlled for bias in their analysis introduced by tweets from commercial groups and bots. Similarly, it is unclear if the dataset included retweets or only original tweets, which is important because many tweets by Twitter users are retweets or replies to commercial tweets, of which bots generate a large number³. In an ongoing study, we found that 75.51% (52301/69264) of psoriasis tweets in English sent between February 2016 and October 2018 by users in the U.S. were of commercial or bot-like nature. Similar results have been reported for Twitter messages about e-cigarettes⁴. Standards for social media data research⁵ should be used to clearly

Corresponding author: Katja Reuter, PhD, Institute for Health Promotion and Disease Prevention Research, Department of Preventive Medicine, Keck School of Medicine of USC, University of Southern California, Los Angeles, California, United States, Phone: 323-442-2046, Fax: 323-442-2082, katja.reuter@usc.edu.

Conflicts of Interest
None declared.

report the data collection and quality assessment, and tools such as “Bot or Not?”⁶ aid in identifying commercial and bot-like content, in this case, to discern patients’ perspectives. While using Twitter to examine psoriasis-related patient perspectives is a novel approach, the lack of detail in describing the methodology weakens the findings reported by Menzies and colleagues.

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