

Clinical Communications

Respiratory allergy buzz on the Internet

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Clinical Implications

- Patients increasingly rely on the Internet for health information. An increase in health professionals' media on the Internet sites may be useful, as well as educational interventions to empower users to effectively engage in self-management.

TO THE EDITOR:

There is a growing body of evidence that health consumers increasingly rely on the Internet for health information,¹ and the search for health-related information before meeting with health professionals, after their consultations, or as a means to help them deal with doubts or unmet needs.² To assess in what topics this empowered information-seeking online is developing, the user's profile, and the digital media they manage, we measured the buzz—amount of information, comments, or interest generated by an issue on the Internet—of allergic respiratory disease during 1 year.

Internet mentions on respiratory allergy throughout 1 year (from January 1, 2014, until December 31, 2014), published in Spanish and geolocated in Spain, were evaluated. Platforms such as YouTube, social media (Twitter and Facebook), blogosphere, and Web pages were analyzed. To avoid biases, journalistic press or press release format mentions were removed and only Internet users' mentions were analyzed. A keyword thesaurus was developed in the network, using the following words: "allergy," "autumn," "asthma," "dust mites," "immunotherapy," "management," "moulds," "pollen," "rhinitis," "respiratory," "spring," "summer," "symptoms," "treatment," and "winter." Brandwatch, Radian6, and Google were the search engines used. Epsilon Technologies Inc (Barcelona, Spain) was hired to do this analysis, and all the mentions were evaluated by 2 digital analysts with experience in the management of monitoring algorithms, 1 market analyst specialized in the filter and quantitatively based categorization, and 1 qualitative market research expert with experience in the pharmacological sector. Epsilon index, created by Epsilon Technologies, Inc, was applied to assess the importance and weight of an opinion/comment with respect to the whole, its influence on the users, and the amount of further mentions that it might generate (1 = very low influence, 5 = very high influence). Thus, with each mention, the index took into consideration the number of visitors to the Web site, registered users, fans, links, Google page rank, Alexa reach, and inbounds. Mentions were classified into 4 categories: (1) scientific arguments, mentions at an institutional level with reliable information—studies, research, and so forth, coming from health professionals or specialized Web sites (physicians, medical clinics, or pharmaceutical companies) or nonspecialized Web sites; (2) campaigns, mentions coming from associations (both involved

and not involved in the allergy field) dealing with promotion or events relating to allergic diseases (eg, asthma education, avoidance recommendations according to environmental levels of pollen); (3) alternative medicine, mentions about natural remedies or therapies; and (4) testimonials, which explored the experiences and/or concerns shared by patients through the different platforms. A total of 16,200 mentions relating to respiratory allergy occurred during the year of the study, but only 5,508 (34%) were analyzed because the rest of the mentions corresponded to journalistic press. Among the platforms studied, no mention had a significantly higher level of influence than the others. The distribution of the citations grouped by categories and type of users—persons who visited the Web site—is shown in Figure 1 (A and B, respectively). There were several testimonials, which nearly reached 40% of the total. Among them, 39% corresponded to questions and comments about allergists, 21% to children and pregnancy, 17% to sports, 14% to personal concerns, and 9% to doubts about prescriptions. Most of these testimonials (3 out of 4) came from allergic patients. A sub-analysis of the mentions about a specific allergy topic such as allergen immunotherapy (AIT) was carried out and, surprisingly, these reached only 3% of the total, including all the categories: scientific arguments, campaigns, and testimonials. Among these mentions, 46% addressed whether AIT was a definitive cure to allergy, 32% were about acknowledgment of AIT and the fear of adverse effects, and 22% about the efficacy of AIT. The distribution of the buzz on the Internet according to the different digital media, separated by categories of mentions, is shown in Figure 2.

Allergic digital activity in Spain, as reported worldwide in the biomedical field,³ has an ongoing expansion. The emergence of these means of communication has led to great achievements such as an exponential growth of the literature³ and beneficial effects on some outcomes in asthma digital self-management interventions.⁴ Nevertheless, to effectively engage in self-management health, consumers must be able to effectively find, understand, and use relevant health information,¹ because there is little evidence to indicate the quality of the information accessed,² and the current topics linked to quality of information for patient education on media such as YouTube are unclear and not standardized.⁵

In the present study, most of the mentions come from nonspecialized media and forums with no proven information or testimonials, compared with those coming from health professionals or specialized media (93.3% vs 6.7%). Besides, there was a high rate of mentions relating to natural and alternative therapies (7%), whereas specific treatments such as immunotherapy were not mentioned much (3%); when AIT was cited, most of the contents were related to acknowledgment or doubts about it. Whether these trends of allergy buzz found in the present study correspond to enquires of the patients' unmet needs (which are unlikely to be mentioned in the consult); to a search of reinforcement with the testimonies of other patients; to a mistrust in the medical councils, which might lead to the search for other treatment options; or to the patients' preferences remains unclear and would need further assessment. The high number of testimonials (38% of the total mentions),

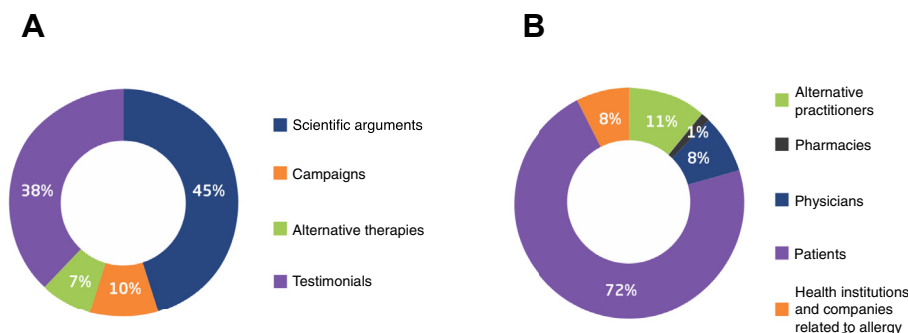


FIGURE 1. A, Main topics of mentions. B, Users' profile.

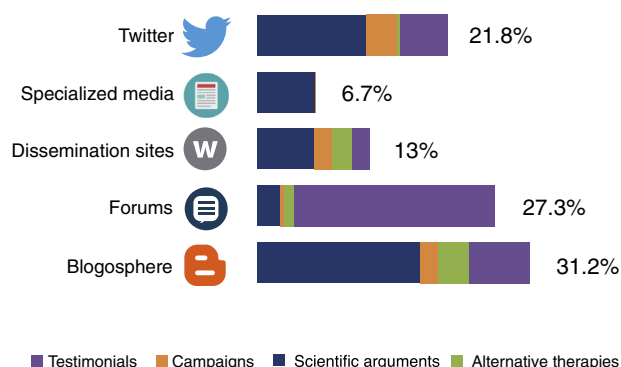


FIGURE 2. Distribution of the buzz on the Internet. The amount of mentions found on Facebook and YouTube were very low (<1% of the total). That is the reason they do not appear in the figure.

and the fact that three-fourth of them are made by allergic patients, supports the great interest in respiratory allergy matters on the Internet, and, thus, should not be ignored. Internet is a powerful communicating tool with potential for assisting health consumers to find reliable health information online.¹ Educational interventions to empower low health literacy users with information-seeking skills may be useful,² and there are opportunities for specialized health professionals to improve the quality and amount of mentions, promoting the interaction

and sharing content that would help and reconnect with the users/patients.

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Conflicts of interest: I. Botella-Padilla is employed by Stallergenes Greer, Inc. D.

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