Imperial College London

Blogging in infectious diseases and clinical microbiology: assessment of the 'blogosphere' content



Rachael Troughton, Gabriel Birgand, Luke SP Moore, Enrique Castro-Sanchez, Esmita Charani, Timothy Rawson, Alison H Holmes

Health Protection Research Unit in Healthcare Associated Infections and Antimicrobial Resistance, Imperial College London, London, UK

Correspondence to: <u>r.troughton15@imperial.ac.uk</u>

Background

Blogs are becoming increasingly widespread, and can be useful for quickly and interactively communicating new information. To explore this resource we analysed the content and characteristics of influential infectious disease (ID) and infection control (IC) blogs and bloggers to describe the ID blogosphere.

Methods

- We conducted a systematic search for blogs in September 2015 in accordance with PRISMA guidelines
- Blogs could focus on ID, IC, medical microbiology or antimicrobial stewardship (AMS)
- We developed a tool to assess their features, content, and blogger demographics and assigned each blog a score
- Motivations and perceptions of bloggers and readers were assessed using an online questionnaire

Results

- 88 regularly updated blogs were identified (fig. 1)
- The majority of bloggers were male (69%), aged in their 40s (median 47), and were either MD and/or PhD

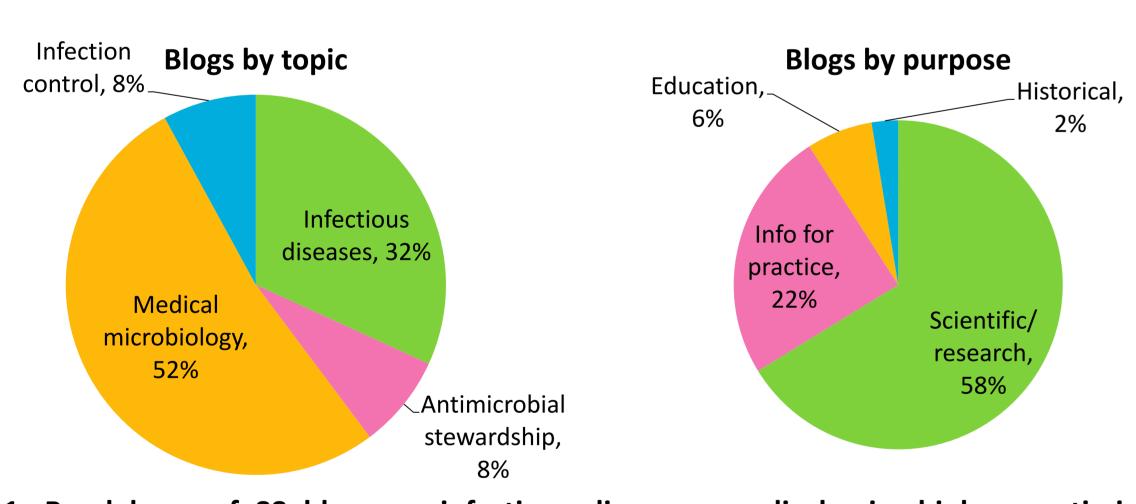


Figure 1: Breakdown of 88 blogs on infectious diseases, medical microbiology, antimicrobial stewardship, or infection prevention and control by topic and by purpose

Rank	Blog Name	URL	Scores
1	Reflections on infection prevention and control	reflectionsipc.com	64.4
2	Microbe Post	microbepost.org	64
3	Virology blog	virology.ws	64
4	Mbiosphere	mbioblog.asm.org	61.4
5	Moselio Schaechter	schaechter.asmblog.org	<i>61</i>
6	Controversies in Hospital Infection Prevention	haicontroversies.blogspot.com	<i>61</i>
7	NEJM, HIV and ID Observations	blogs.jwatch.org/hiv-id-observations	<i>59</i>
8	Global network, neglected tropical diseases	endtheneglect.org	58.4
9	Blastocystis parasite blog	blastocystis.net	57.4
=10	TRACKING ZEBRA	trackingzebra.com	<i>57</i>
=10	Virology Down Under	virologydownunder.blogspot.com	<i>57</i>

Table 1: Top 10 scoring blogs as rated by the tool developed by the authors. Blogs were assessed on 4 quantitative criteria, and 15 qualitative criteria on a Likert scale. Criteria deemed of high importance were given double weighting



Figure 2: Word cloud of 29 bloggers' responses to survey question "What are your motivations for blogging?"

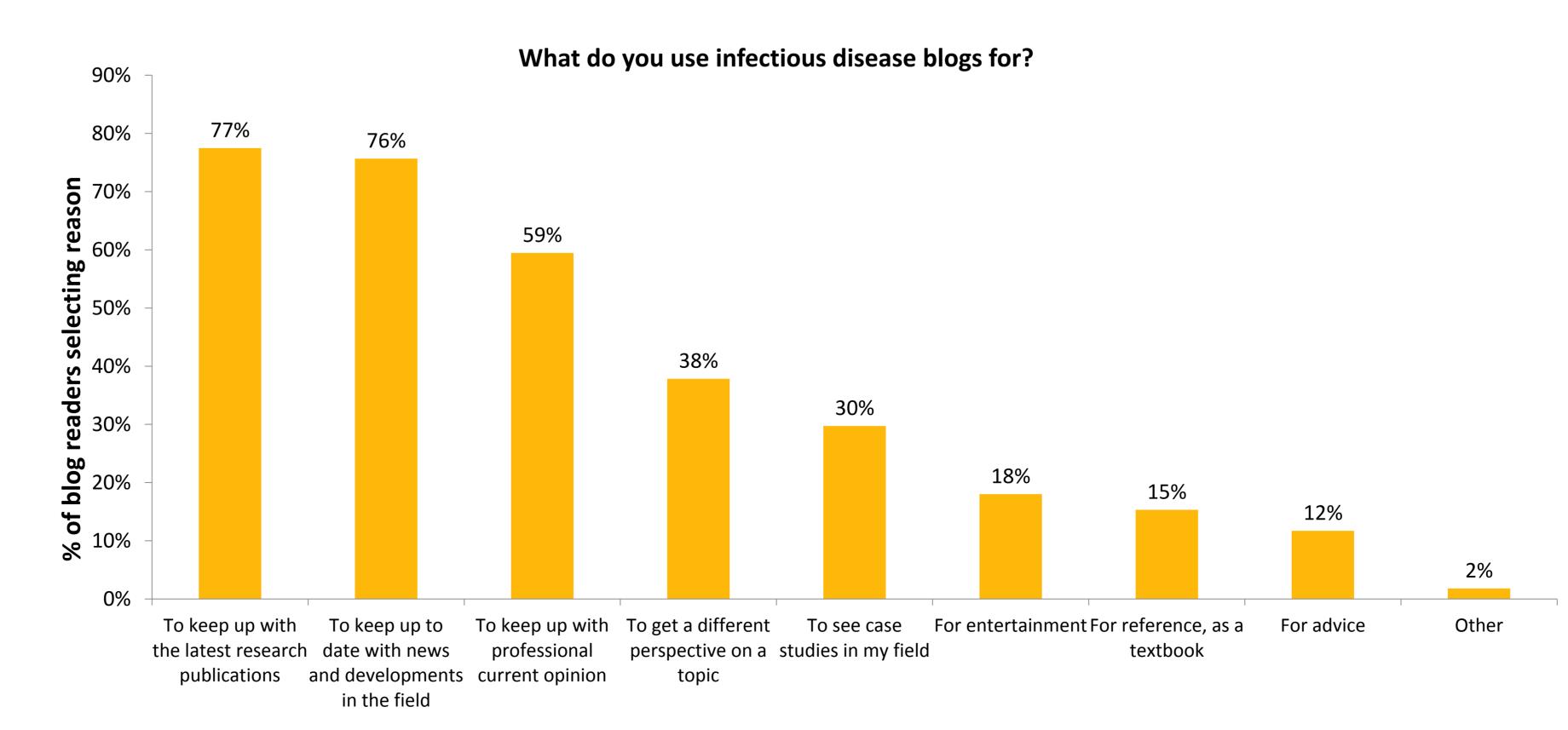


Figure 3: Reasons readers give for using blogs. 111 blog readers were either contacted directly, via bloggers who took part in the blogger survey, or via newsletters of relevant organisations

Blogger motivations

- The 29 bloggers surveyed were motivated by teaching, giving independent opinions, raising their profile, keeping up to date, and encouraging discussion (fig. 2)
- Bloggers feel they provide easy access to information, with a unique angle due to their experience, and influence the research or practices of readers

Reader perceptions

- The 111 readers surveyed mainly use blogs for concise updates on research, professional news, and current opinion in their field of interest (fig. 3)
- Readers appreciate concise posts on topical issues, with expert interpretation and entertaining writing
- Readers were mainly healthcare professionals or academics
- More than half (55%) of readers at least sometimes shared blog posts they read (fig. 4)

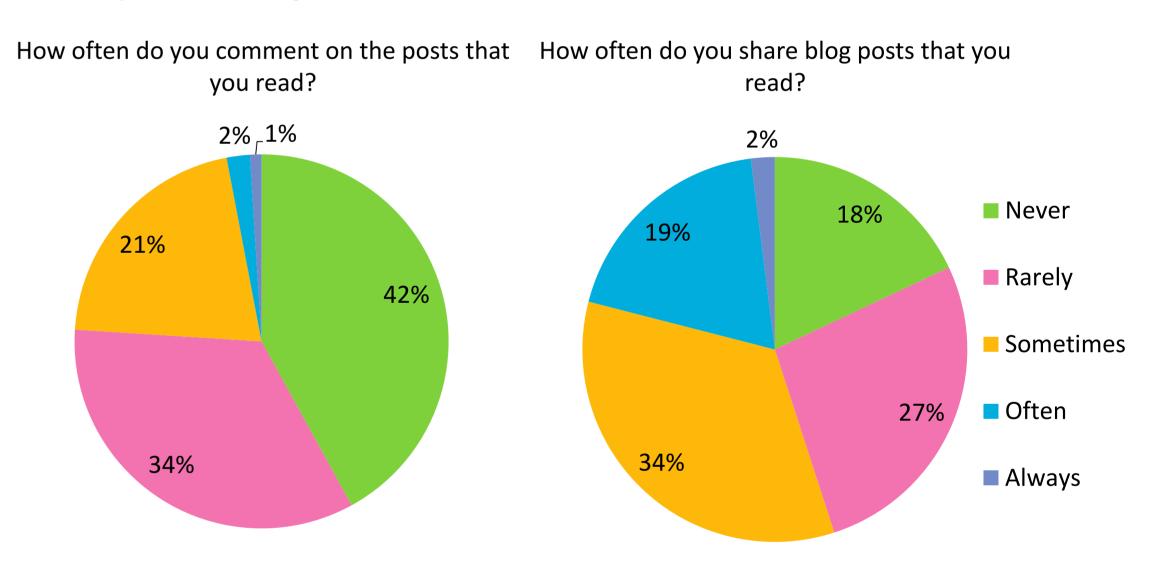


Figure 4: Blog readers' interactions with blogs posts. Blog readers never or rarely commented on posts, but more than half shared blog posts they read at least sometimes

Conclusions

- ID, (AMS), IC and medical microbiology blogs represent userfriendly, interactive, and efficient tools for the development of collective intelligence networks
- As well as giving a new assessment tool and a list of quality blogs, this study highlights a lack of AMS blogs
- Bloggers should aim to keep their posts concise and topical, and include expert interpretation

Acknowledgements The authors would like to thank the bloggers and blog readers who completed the survey, and in particular the bloggers and organisations who distributed the reader survey.