

What healthcare works can learn from Twitter via green spaghetti junctions

The [BMJ cover story on 9 September 2017](#) described the response to a Twitter ban at a large conference in the US. Was this a lot of witter, a social media storm in a teacup; or did it represent censorship and a missed opportunity to learn at a conference?



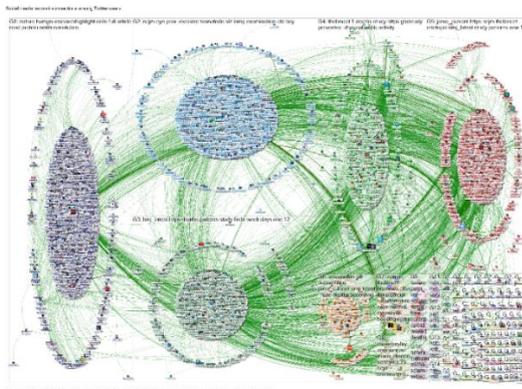
Source: [BMJ cover story, 9 September 2017](#)

I started using Twitter in 2013 when “[early adopters](#)” were evangelising about its potential. I learnt by observing others and started tweeting. Following people with shared interests led to connections and further learning. However, the idea of scrolling through lots of tweets on a small device has never appealed very much.

Twitter provides a glimpse of clinical and scientific developments, often well ahead of print. Colleagues share ideas in accessible ways (eg infographics, short films, or blogs). However, the volume of information quickly becomes overwhelming. Big names across clinical specialties are on Twitter. Click from person to person, through hashtags, follow Twitter recommendations and you’ve lost an hour without much to show for it. You need a strategy to use Twitter effectively.

Conferences are a great way to start using Twitter in a more structured way. Delegates and conference organisers often start tweeting using the conference hashtag a few days in advance. You will arrive at the conference prepared, with ideas of work to search out and people to meet. However, after the conference has finished you need to have a plan about how to stay in touch and informed.

As a Public Health doctor I am interested in the big picture. The first time that I saw a social network analysis (SNA) map (of a conference [via Mark Outhwaite, July 2015](#)), I was hooked. These maps show interactions around a Twitter search term. It took me over a year to try my own maps, and another few months to understand the potential of these mystifying and beguiling green spaghetti junctions.

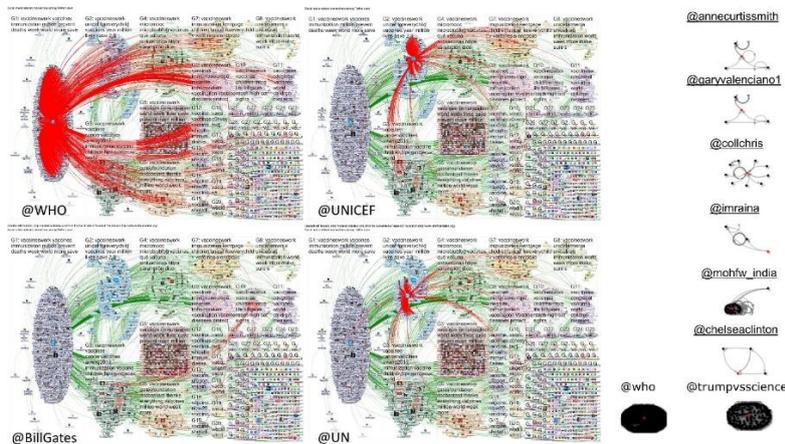


Source: [NodeXL social network analysis of the 5 top global medical journals, 19-26 September 2017](#)

In October 2016 I started to use SNA tool [NodeXL](#) to work through a series of topics, including conferences and health campaigns. Automated [reports](#) provide summaries including top influencers, hashtags and weblinks from tweets. However, richer information is available from the individual tweets captured by NodeXL. Sifting through tens of thousands of tweets takes a few minutes using approaches I have [refined](#) over recent months. I identify the most shared posts as a rapid means of “digital curation”: if something has been shared a lot it is either popular or controversial, so there

will be something to learn. This approach gives a contemporary glimpse into the response of professionals, patients and/or public. You can access the resulting “big data” [summaries](#) even if you don’t tweet: e.g. see my summary of BMJ/ IHI International Forum on Quality and Safety in Healthcare [#Quality2017](#).

The approaches have wider application. Studying Immunization Week 24-31 April 2017 (hashtag: #VaccinesWork which is used year-round) I was interested – and concerned – that one of the tweeters with the biggest potential audience ([number of followers multiplied by number of tweets](#)) was an antivaccination campaigner. Some weeks his tweets had a larger potential audience than large global campaigning organisations such as the World Health Organisation and UNICEF. I used SNA to study his connections. The antivaccination campaigner might have had a lot of followers, and a lot of potential views, but his tweets were hardly connecting. He was howling into the void. In comparison, the global organisations, and many individual vaccine advocates, achieved a much larger number of connections with accessible, clear and evidence-based materials explaining the benefits of vaccination for a general audience. The full analysis is available on [my blog](#).



Source: #VaccinesWork tweets using NodeXL.

In addition to searching for hashtags it is also possible to use NodeXL to study people, organisations, weblinks and words and phrases on Twitter. This approach can be deployed to look at specific questions – for example to study the considerable social media impact of the [BMJ cover story on the conference Twitter ban](#). The method is also useful in keeping up to date with top medical journals more generally. A recent search (19-26 September 2017) identifies top content from almost 23,000 tweets by over 13,000 tweeters. The resulting [top 50 summary](#) includes videos of clinical examination (including an [ocular trematode](#) featured in NEJM), clinicians’ responses to journal articles and tightly worded summaries, with weblinks to clinical and academic content from across these journals.

Twitter therefore has huge potential for healthcare workers for CPD and networking, and to study their impact if active on Twitter. However, you don’t even need to be on Twitter to access this content. The approach to digital curation described here can provide an up-to-date view of the medical and scientific world, driven by and feeding an endless curiosity and desire to learn.

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Links: My further outputs from NodeXL analyses are available at my [ScotPublicHealth blog](#) and [Storify page](#), and these are updated regularly.

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