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Title:

A content analysis of online forum discussion about measles, mumps and rubella (MMR) vaccination between 2004 and 2015. Weller R, White S. School of Pharmacy, Keele University

Abstract: (Please refer to instructions to authors and example abstract)

Focal Points:

- The study aimed to explore discussion about MMR on Mumsnet between 2004 and 2015
- Majority views about not giving MMR and the unacceptability of MMR-related harm changed around 2010 to support for MMR and greater acceptance of risks
- Users demonstrated currency and sophistication of understanding about the issues, which should deter promotion of simplistic health messages about such topics

Introduction:

The proportion of children in England receiving MMR vaccination fell to an all-time low in 2003 following Andrew Wakefield's 1998 claim of an association between MMR and autism, but rose to its former proportion by 2012.¹ Skea et al's analysis of discussion about MMR on Mumsnet up to 2003 explored users' views during this dramatic fall.² This study aimed to explore users' views since, which does not appear to have been reported, despite the rise in the vaccination rate being similarly dramatic.

Methods:

Following institutional ethics approval, the discussion forum on Mumsnet was searched for English language posts and threads related to MMR from 2004 onwards using internal search tools (terms: "MMR"; "vaccine"). Mumsnet was searched to allow comparison with previous work.² Relevant posts from 4 time periods with increases in MMR-related forum activity were selected for analysis: 2004-5 (partial retraction of Wakefield's paper); 2007 (GMC investigation); 2010 (Wakefield struck off, paper fully retracted); and, 2012 onwards (withdrawal of single mumps vaccine). The content of posts was analysed using the framework analysis approach.

Results:

Four linked themes emerged from 2004-5 posts: minority support for giving MMR as recommended, mistrust of authorities, evidence neither proving nor disproving an autism link, and the risk of vaccine-induced harm being unacceptable. The most frequently expressed view about whether to give MMR, was that it should not be given at all. Others advocated giving MMR, but at 15-18 months old (when autism often presents) rather than 12 months old. There was support for "singles" as an alternative. Mistrust of Government and health professions (e.g. for misrepresenting, oversimplifying or concealing information) was more frequently expressed than supportive views. The media was generally portrayed as perpetuating fears and inaccurately reporting data. Users most commonly perceived that research had not proven any association between MMR and autism. Some users discussed the evidence in detail, e.g. a 2005 study showing no decrease in the incidence of autism following MMR withdrawal in Japan. However, the view that research had not disproved an association was also commonly expressed and there was support for Wakefield, mainly in terms of him being a 'scapegoat' or the subject of a 'witch hunt'. The majority view appeared to be that the risk of vaccine-induced harm was unacceptable, but awareness was expressed about potential harm from measles, mumps or rubella, and of social responsibility for herd immunity through vaccination. This situation remained in 2007 but discourse on authorities now seemed focused on the right to choose whether to vaccinate and being allowed to choose 'singles'.

In 2010 this had changed. A greater proportion of posts supported giving MMR than not giving it. There seemed more support for the GMC's decision to strike Wakefield off than support for him. The majority now viewed the risk of vaccine-induced harm as small and the risk from measles, mumps and rubella being greater. These trends remained in the 2012 onwards data.

Discussion:

These findings suggest sometime around 2010 as the turning point when forum users' support for MMR outweighed rejection. The findings also show the currency and sophistication of users' understanding about relevant issues, which although limited to a single discussion forum supports other study findings² and should deter health professionals from promoting overly simplistic health messages about such topics.

References:

1. Health & Social care Information Centre. NHS Immunisation Statistics. England, 2014-15. Available at: <http://www.hscic.gov.uk/catalogue/PUB18472/nhs-immu-stat-eng-2014-15-rep.pdf> (last accessed 24/03/2016).
2. Skea Z, Entwistle V, Watt I, Russell E. 'Avoiding harm to others' considerations in relation to parental measles, mumps and rubella (MMR) vaccination discussions – An analysis of an online chat forum. Soc Sci Med 2008; 67: 1382-90.