



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

A picture IS worth a thousand words

Citation for published version:

Oliver, CW, Murray, A & Hilary, S 2016, 'A picture IS worth a thousand words: Why healthcare professionals should know (and care) about infographics' *British Journal of Sports Medicine Blog*.
<http://blogs.bmj.com/bjasm/2016/02/19/a-picture-is-worth-a-thousand-words-why-healthcare-professionals-should-know-and-care-about-infographics/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+bjasm%2Fblogs+%28Latest+from+British+Journal+of+Sports+Medicine+blogs%29&g=w_bjasm_blogs_tab>

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

British Journal of Sports Medicine Blog

Publisher Rights Statement:

Creative Commons CC BY-NC 4.0

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



BMJ Group blogs

BJSM blog – social media's leading SEM voice

A picture IS worth a thousand words: Why healthcare professionals should know (and care) about infographics

19 Feb, 16 | by BJSM

By Chris Oliver @cyclingsurgeon, Hilary Scott @thehilsarealive and Andrew Murray @docandrewmurray

} < 189 K 4 X 33

Many industries use infographics: business, politics, food, finance, and healthcare, including physical activity promotion. Statistically, the most successful infographics, in terms of number of 'shares' on social media, contain an average of 396 words (1) and a combination of data visualisations (e.g. bar graphs, line graphs, pie charts) and illustrations. 396 words may seem like an inadequate amount of text for many researchers to convey their findings comprehensively, but the saying "a picture tells a thousand words" comes to mind. Three days after learning new information, we are likely to remember up to 6.5 times more through learning from an infographic than reading text alone (2).

However the impact and accuracy of existing infographics is highly variable. Many are published on social media once or twice, then quickly forgotten. Successful infographics should be shared and re-shared again and again on social media to build campaign impact and increase audience reach. The more people who see an infographic, the more who can talk about and share it's important message. As healthcare professionals and researchers we are good at creating content, but perhaps we could gain by making the information engaging, widely seen and sticky, like Dr Mike Evans hit video 23.5 hour (worth a watch if you haven't seen it).

Interestingly in the UK we devise and publish physical activity policies and infographics, yet our people are not physically active adults compared with other European countries (3). An infographic designed by the UK's Chief Medical Officers (CMOs) was launched in 2015 to accompany the physical activity guidelines document 'Start Active, Stay Active', first published in 2011 (4).



This infographic is an excellent example of what works: transmitting a message and engaging the reader through a three-step process of 'raising awareness', 'changing and challenging attitudes' and providing a 'call to action' for individuals to change their behaviour and become more physically active (5).

Health infographics are designed to stimulate the following responses from readers – 'attention, comprehension, recall and adherence' (6). The design of the CMOs' infographic was set out in clear terms, allowing members of the public to understand its message without requiring explanation from health professionals as it did not contain complex medical terminology. Easy to understand content is recommended when designing any infographic as this will likely increase the sharing of knowledge among researchers, practitioners and lay people. Infographics have potential to make information more accessible across a diversity of populations.

A successful infographic gets people talking about its message and sharing it more widely

An infographic succeeds if it both attracts people's attention and they can comprehend the presentation of information. Even better if it encourages them to consider behaviour change themselves, and / or share the messages with their networks. Infographics can build a bridge between lay people and health professionals, and they can clarify important 'take-home messages' and provide direction for health promoting behaviours.

In short, infographics are a powerful tool for communicating key messages clearly, changing attitudes, and even challenging people to change their mindset and/or behaviours. In consideration of research with impact, perhaps each research paper should produce an infographic!

Chris Oliver (@cyclingsurgeon) is a Honorary Professor of Physical Activity for Health at the University of Edinburgh, and a Consultant in Trauma and Orthopaedics.

Hilary Scott (@thehilsarealive) is a third year BSc Applied Sport and Exercise Science student at Robert Gordon University in Aberdeen. She recently completed a six week placement at the Physical Activity for Health Research Centre at the University of Edinburgh and researched the use of infographics in communicating important messages about physical activity.

Dr Andrew Murray (@docandrewmurray) thinks regular physical activity is the best thing we can do for our, and our children's health. He is a Sports and Exercise Medicine consultant and PhD student at the University of Edinburgh, amongst other roles

REFERENCES

1. Ahmad, I. *What Makes Infographics Go Viral [Infographic]*. [blog]. 2016 Jan 1 [cited 2016 Jan 11]. Available from: <http://www.socialmediatoday.com/social-business/what-makes-infographics-go-viral-infographic>.
2. Krum R. *Cool Infographics: Effective Communication With Data Visualization and Design*. Hoboken, NJ: Wiley; 2013.
3. Murphy, M. and Cavill, N. Do physical activity infographics, report cards and policies influence behaviour? *The Sport and Exercise Scientist*, 2015; Winter 2015(46).
4. Great Britain. Department of Health. *Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers*. London: Department of Health; 2011.
5. Bauman, A. and Chau, J. The Role of Media in Promoting Physical Activity. *Journal of Physical Activity and Health*, 2009; 6(Suppl2), S196-S210.
6. Houts, P.S. et al. The role of pictures in improving health communication: A review of research on attention, comprehension, recall, and adherence. *Patient Education and Counselling*, 2006; 61(2).

We recommend

3rd International Conference on Concussion in Sport 2008 abstracts
Br J Sports Med, 2009

Making every contact count for physical activity—for tomorrow's patients: the launch of the interdisciplinary, undergraduate, resources on exercise medicine and health in the UK
Ann B Gates, Br J Sports Med, 2015

Sport as a setting for promoting health.
Alex Donaldson et al., Br J Sports Med, 2012

Lifetime injury prevention: the sport profile model.
Nick Webborn, Br J Sports Med, 2012

Establishing a national inclusion programme
Jennifer Gosney, Br J Sports Med, 2010

A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication.
S Anne Moorhead et al., J Med Internet Res, 2013

The Effect of Information Communication Technology Interventions on Reducing Social Isolation in the Elderly: A Systematic Review
Peter J Schulz et al., J Med Internet Res, 2016

Pinterest and the prevalence of anti-vaccine rhetoric
Tim Newman, Medical News Today

Social Media and HIV: A Systematic Review of Uses of Social Media in HIV Communication
Malika Roman Isler et al., J Med Internet Res, 2015

Social Media Has Benefits And Risks For Kids
Catharine Paddock PhD, Medical News Today, 2011