



Evaluation of entertainment-education YouTube videos focused on infection control and prevention

Never Stand Still

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<https://goo.gl/KnQRtR>

November 2016

Acknowledgements

- The work that is being presented here was undertaken by Kathryn Lim as part of her Masters of Public Health course.
- Co authors: J Storr and C Kilpatrick from S3 Global, United Kingdom

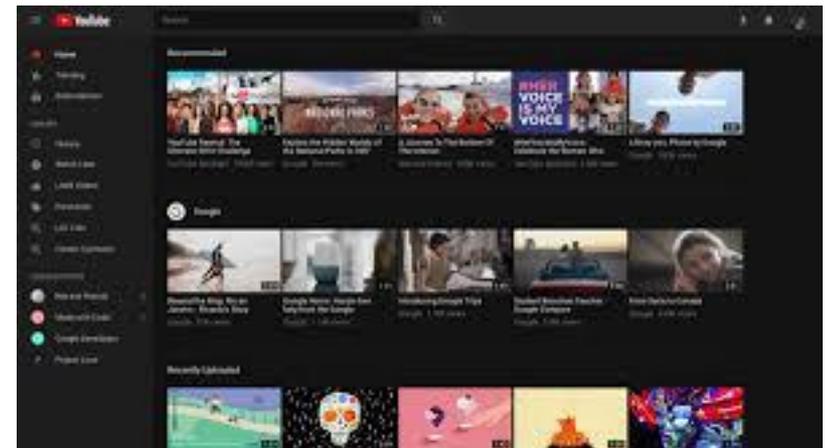
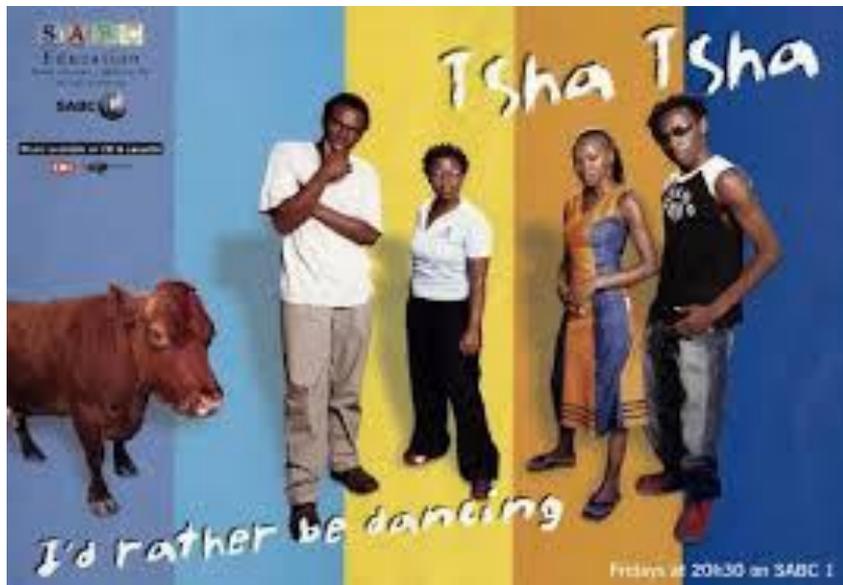
Background

- Usual practice: Written information, reminders, posters and continuous feedback on performance.
- Education-entertainment has been utilized to inform, influence and shift societal and individual behaviors

“Intentional placement of educational content in entertainment messages”

Singhal and Rogers (2002)

- Involves delivering an educational message through an entertainment-based mechanism, often using audio-visual media
- Previously used for promoting: Reproductive health, family planning, and HIV prevention



Images
http://www.sabc.co.za/wps/portal/intsales/pages/childrendetail?id=aceedf804927d9f482ad8b676a4d624c&page_from=children
https://www.newvision.co.ug/new_vision/news/1458458/adolescents-musical-battle-hiv-aids

Aims

- A significant amount of time and effort is invested in the production of this content (in some cases)
- Important to understand the effectiveness and subsequent impact of these videos on healthcare professional behaviour relating to infection control and prevention.
- However, no current knowledge about the videos themselves
- As a first step, a social media content analysis was undertaken to investigate the current extent to which these videos are produced, shared and interacted with via YouTube, focussing on EE relating to the promotion of HH.

Approach

- A key word search of YouTube was conducted using the search terms: “hand hygiene”, and “hand hygiene education”.
- Large number of hits (“hand hygiene” = 900,000 hits). Limited to first ten pages for each term.
- Video content had to be directed at a healthcare professional audience, with the intention to either promote or educate on the principles of HH in an entertaining manner.
- Included: song and dance, parodies, skits and animations
- Excluded: Lectures, advertisement or news items, demonstrations of HH technique
- Info extracted: Video title, duration of the video (in seconds), average view duration (in seconds), country of origin, number of days on YouTube, and total number of views, likes/dislikes



- Content evaluation checklist: attractiveness, comprehension and persuasiveness.
- Adapted for use from the Agency for Healthcare Research and Quality's Patient Education Materials Assessment Tool (PEMAT)
- Total scores for each category were obtained and an overall percentage calculated for each individual video
- Each individual video was also informally evaluated from a qualitative perspective, resulting in the production of descriptive analyses.
- Observational features of each video relating to participant composition were noted, such as the cultural, ethnic and occupational diversity contained within the audio-visual content

Results

- 400 YouTube videos screened- 70 videos retained
- North America (60%, n=42), followed by Asia (28.6%, n=20) and Europe (7.1%, n=5). The remainder of the videos were produced in Africa, Oceania and the Middle East
- North America included members of various hospital departments (for example, infectious diseases, intensive care unit); the videos from Asia appeared to contain limited involvement from members of a single department, such as pharmacy
- Dance orientated videos appeared to include a greater proportion of female involvement, particularly those which originated from Asia
- In several videos, appropriation or adaptation of lyrics to popular music was utilised to convey a HH message. In these videos, the organisations or individuals performed original lyrics relating to HH to the tune of recognised songs by popular artists (for example, The Beatles).





'Educationally useful' videos

- 55.7%
- More likely:
 - To have a higher median video duration
 - To be produced in North America
 - Higher mean attractiveness score (2.8 (SD 0.5) compared to 2.5 (SD 0.7), $p = 0.1$)
 - Relevance of images reinforcing the message contained in the videos (92.3% (n=36) compared to 67.7% (n=21)).
 - Higher mean comprehension score
 - Everyday language and an active voice
 - Had a higher mean persuasiveness score
 - Organisation wide involvement/explicit or implied references to the involvement of an executive leadership team member

Discussion

- There is a need for validation of the accuracy of the health information presented:
 - Miscommunication of the concept of the “five moments of hand hygiene” was observed in several of the YouTube videos.
 - YouTube videos which showed dance routines were more likely to have incomplete or incorrect demonstration of HH technique
- A general lack of alignment with best practice principles relating to the use of social media and health marketing strategies:
 - It is important that messaging remains clear and accurate
 - The inclusion of direct references to the audience through clear calls to action will increase the persuasiveness aspect of these videos.
 - Could use CDC Social Media Toolkit
- Important to use a range of staff members- clinical/non clinical plus include management