

humanVACCINES

& IMMUNOTHERAPEUTICS

Hum Vaccin Immunother. 2014 Sep; 10(9): 2636–2637.

Published online 2014 Nov 19. doi: [10.4161/hiv.32234](#)

PMCID: PMC4975068

PMID: [25483481](#)

Social media targeting of health messages

A promising approach for research and practice

Cornelia Betsch

▸ Author information

▸ Article notes

▸ Copyright and License information

[Disclaimer](#)

See the article "[Knowledge, attitude, and uptake related to human papillomavirus vaccination among young women in Germany recruited via a social media site](#)" in volume 10 on page 2527.

This article has been [cited by](#) other articles in PMC.

Abstract

Go to: ☑

In their contribution, Remschmidt and colleagues<sup>1</sup> put forward an innovative approach for recruiting female, German study participants from diverse social and ethnical backgrounds to assess their knowledge, attitudes, and behaviors regarding HPV vaccination. The approach involves placing advertisements on the social media platform Facebook that specify tags for not only the sought after socio-demographic characteristics (age, gender) but also self-relevant aspects of the target group. These tags determine which Facebook users will see the ad. By sequentially adjusting the tags, the researchers were able to recruit different sub-populations, resulting in a final sample similar to a representative German sample for a particular age group.

Keywords:

Social media marketing, recruitment, health 2.0, tailoring

In this comment, I encourage both researchers and communicators to use this method of peripheral, social media-based targeting to first learn more about knowledge gaps, lacking awareness, attitudes, and potential misperceptions and then, in a second step, tailor campaigns using the same targeting strategy to close those knowledge gaps, create awareness, and correct misperceptions.

Social Media Targeting

Go to: ☑

Social media marketing allows one to present advertisements to a target group that is specified by both socio-demographic characteristics as well as self-relevant aspects such as cultural interests, idols, and lifestyle-preferences. While this technique is used quite commonly in advertising, the authors demonstrate its use for recruiting participants in an adaptive manner to optimize sample characteristics. A clear challenge of this technique is to identify relevant population characteristics and peripheral interest variables that can then be used as tags. Remschmidt and colleagues hired a marketing firm; conducting focus groups might also be a potential solution.

Interestingly, social media targeting is not effective because it tailors the advertisement to the interests of the individual.<sup>2</sup> Rather, it simply increases the receivers’ exposure to the ad. Similar strategies can be used with other online tools such as Google ads, which places advertisements relevant to individuals’ search terms at the beginning of the search results list. For example, if a researcher is attempting to reach young Turkish females, the advertisement might be displayed when an individual enters search terms relating to Turkish celebrities. The success of this strategy also indicates that it is not always necessary to translate the advertisement and study materials to the target population's native language; instead one can improve recruitment rates simply by increasing the frequency with which the target group is exposed to the advertisement.

Combination of KAB/P-Research and Health Communication

Go to: ☑

The study by Remschmidt and colleagues identified a set of knowledge and attitude variables that differed significantly between vaccinated and non-vaccinated females. It is logical to use this knowledge to reach the same population in a second step, this time with the goal of disseminating messages aimed to close knowledge gaps and raise awareness – such as for the fact that condoms do not protect against HPV. Further, misperceptions concerning potential adverse events should also be corrected,<sup>3,4</sup> especially since myths about deaths following HPV vaccination are still widespread. Remschmidt et al. also identified that a physician's recommendation was a strong predictor for HPV vaccination. Physicians who do not recommend the vaccination need not necessarily be against it. Thus, another part of a campaign could encourage young females to ask their doctor for the vaccine or advice regarding the vaccine.

Timely vaccination is important for HPV vaccine effectiveness and can make fewer single vaccinations necessary (2 instead of 3 when given between the age of 9 and 13<sup>5</sup>). Thus, tailored messages can also be targeted toward young females who may be excluded from studies such as that by Remschmidt and colleagues because they are under 18. Despite differences in age, younger females’ attitudes and knowledge gaps may still be very similar to the ones identified in the study population.

Recently, WHO Euro published a guide on how to tailor immunization programs (TIP),<sup>6</sup> which is useful in identifying critical factors that prevent vaccine uptake in particularly susceptible and under-served groups (e.g., Roma in Bulgaria, Somali and anthroposophist population in Sweden, HCW in Montenegro;<sup>7</sup>). A lean version of this process could make use of the present results. In target groups that can be reached via the Internet, obtaining access to certain sub-populations may be facilitated via social media, which would help to both determine the population's knowledge, attitudes, beliefs, behaviors, and practices as well as reach the same target group with tailored interventions. In a sense, having reached the target group for the KAB/P study can be interpreted as a pilot test of the targeting strategy for subsequent interventions.

Further Areas of Interest

Go to: ☑

Social media targeting can be applied to a wide variety of other health topics. Vaccinations against influenza<sup>2</sup> and pertussis<sup>8</sup> during pregnancy are increasingly in the focus of public health organizations. Likewise, vaccination strategies to protect newborns via parental vaccination against pertussis and the vaccination of siblings against MMR are crucial. Pregnancy and early motherhood are subjects frequently shared on Facebook. “Likes” for pages and brands that are related to pregnancy, child rearing, and maternal and children's health can easily be used for social media targeting. In doing so, researchers and health officials can first assess knowledge, attitudes, and behavior of this group and then design campaigns to specifically meet the informational needs of the targeted group. Approaching the target group via social media additionally provides the chance that contents will be shared to friends and, therefore, may have an even larger impact.<sup>9</sup>

In summary, the research by Remschmidt and colleagues demonstrates the great potential of applying social media targeting to reach sub-populations that otherwise may not be easily reached both to participate in research and receive tailored health messages. Combining research and intervention represents an economic solution, as the tags can be re-used to effectively reach the identified target group with tailored messages.

Disclosure of Potential Conflicts of Interest

Go to: ☑

The author states he has no conflict of interest.

References

Go to: ☑

1. Remschmidt C, Walter D, Schmich P, Wetzstein M, Deléré Y, Wichmann O. Knowledge, attitude and uptake related to human papillomavirus vaccination among young women in Germany recruited via a social media site. Hum Vaccin Immunother, In press. [\[PMC free article\]](#) [\[PubMed\]](#) [\[Google Scholar\]](#)

2. Noar SM, Benac CN, Harris MS. Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions. Psychol Bull 2007; 133:673-93; PMID:17592961; <http://dx.doi.org/10.1037/0033-2909.133.4.673> [\[PubMed\]](#) [\[CrossRef\]](#) [\[Google Scholar\]](#)

3. Cook J. The debunking handbook. Available at [http://www.skepticalscience.com/docs/Debunking\\_Handbook.pdf](http://www.skepticalscience.com/docs/Debunking_Handbook.pdf) [\[Google Scholar\]](#)

4. Lewandowsky S, Ecker UKH, Seifert CM, Schwarz N, Cook J. Misinformation and Its Correction: Continued Influence and Successful Debiasing. Psychol Sci Public Interest 2012; ••:106-31; <http://dx.doi.org/10.1177/1529100612451018> [\[PubMed\]](#) [\[CrossRef\]](#) [\[Google Scholar\]](#)

5. WHO (2014). Evidence based recommendations on Human Papilloma Virus (HPV) Vaccines Schedules [http://www.who.int/immunization/sage/meetings/2014/april/1\\_HPV\\_Evidence\\_based\\_recommendationsWHO\\_with\\_Appendices\\_2\\_3.pdf](http://www.who.int/immunization/sage/meetings/2014/april/1_HPV_Evidence_based_recommendationsWHO_with_Appendices_2_3.pdf) [\[Google Scholar\]](#)

6. Europe WHO. (2014). Tailoring immunization programmes to reach underserved groups – the TIP approach. <http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/activities/tailoring-immunization-programmes-to-reach-underserved-groups-the-tip-approach> [\[Google Scholar\]](#)

7. Eppes C, Wu A, You W, Cameron KA, Garcia P, Grobman W. Barriers to influenza vaccination among pregnant women. Vaccine 2013; 31:2874-8; PMID:23623863; <http://dx.doi.org/10.1016/j.vaccine.2013.04.031> [\[PubMed\]](#) [\[CrossRef\]](#) [\[Google Scholar\]](#)

8. CDC. (online). Vaccines for Pregnant Women. <http://www.cdc.gov/vaccines/adults/rec-vac/pregnant.html> [\[Google Scholar\]](#)

9. Betsch C, Brewer NT, Brocard P, Davies P, Gaissmaier W, Haase N, Leask J, Renkewitz F, Renner B, Reyna VF, et al. Opportunities and challenges of Web 2.0 for vaccination decisions. Vaccine 2012; 30:3727-33; PMID:22365840; <http://dx.doi.org/10.1016/j.vaccine.2012.02.025> [\[PubMed\]](#) [\[CrossRef\]](#) [\[Google Scholar\]](#)

Articles from Human Vaccines & Immunotherapeutics are provided here courtesy of Taylor & Francis

Formats:

Article

|

[PubReader](#)

|

[ePub\(beta\)](#)

|

[PDF\(54K\)](#)

|

[Citation](#)

Share

[Facebook](#)

[Twitter](#)

[Google+](#)

Save items

★ Add to Favorites

▼

Similar articles in PubMed

Cited by other articles in PMC

A qualitative analysis of the beliefs of Japanese anti-influenza vaccination website authors

[Heliyon. 2018]

Comparing human papillomavirus vaccine concerns on Twitter: a cross-sectional study of users in Australia, Cane [BMJ Open. 2017]

Can Facebook Be Used for Research? Experiences Using Facebook to Recruit Pregnant W [Journal of Medical Internet Re...]

The Effectiveness Of Social Media (Facebook) Compared With More Traditional Advertising Met [JMIR Research Protocols. 2016]

Vaccine criticism on the Internet: Propositions for future research

See all...

Links

PubMed

Taxonomy

Recent Activity

Turn Off

Clear

Social media targeting of health messages

Stigma, schizophrenia and the media: exploring changes in the reporting of schiz...

PubMed

Development of Auditory Sensitivity in Children Who Stutter and Fluent Children

See more...

Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions.

[Psychol Bull. 2007]

Barriers to influenza vaccination among pregnant women.

[Vaccine. 2013]

Opportunities and challenges of Web 2.0 for vaccination decisions.

[Vaccine. 2012]