Sexually Transmitted Disease Prevention Campaigns in the 21st Century: New Frontiers in Social Media

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The assessment of the Get Yourself Tested (GYT) campaign presented by Friedman et al.,¹ in this issue of Sexually Transmitted Diseases, is important both for identifying the opportunities to use and integrate 21st century social media and mobile health (mHealth) tools into sexually transmitted disease (STD) prevention initiatives and for identifying the key areas where our field can improve to maximize the use of these tools.

The GYT campaign offers an important perspective on 3 elements of health communication campaigns in the digital era including: (a) the use of multiple and diverse social media tools, (b) the role of social science theory, and (c) the integration of multiple and big data sources for evaluation. I will discuss each of these in turn.

USING MULTIPLE AND DIVERSE SOCIAL MEDIA TOOLS

Get Yourself Tested is a multidimensional campaign with traditional face-to-face events and activities augmented by online social media activities. The authors bring attention to the now critical need to harness social media and mHealth tools in health promotion campaigns. Get Yourself Tested uses highly popular social media tools such as Twitter, Facebook, Foursquare, and text messaging to promote STD testing. In addition to social media, they promote a telephone-based application (app) that allows users to input their zipcode and receive a text message in return identifying testing sites nearby (the STD Testing Locator) in an effort to increase access to and utilization of STD testing services.

Friedman et al. describe where they posted messages and, to some extent, what they did (e.g., a challenge on Facebook to make pledges to test for STD within the month). The primary goal described for GYT was to use social and mobile media tools to drive people to the GYTNOW Web site. Although this is certainly reasonable, it raises questions about whether GYT is really maximizing social media. Does GYT miss important opportunities to carefully tailor messages about STD Testing to match the expected type of message on each social media site? This is of course an empirical question, but one wonders what the campaign impact might be if messages on the experience of STD testing are tailored to site specializations. So, messages on Twitter might include celebrities tweeting “get tested!” or even “I tested” (evocative of the compelling and impactful disclosure of Magic Johnson after testing for HIV 20 years ago); on Facebook, they could have friends in networks endorse or “like” a test site; and on You Tube, they could show videos describing the process of testing and others addressing anxiety about testing, and so on.

THE ROLE OF SOCIAL SCIENCE THEORY IN 21ST CENTURY MEDIA CAMPAIGNS

Although the authors demonstrate that GYT both reaches youth and campaign activities are associated with periods of increased STD testing, what we lack is an understanding of how much campaign exposure generates testing, which channels are effective, and how the decision to test is made manifest.

Starting with the consideration of how the decision to test is made manifest allows us to critically contemplate the role of social and behavioral science theory in 21st century health promotion campaigns. The GYT campaign was informed by formative research and constructs from the Health Belief Model² and the Theory of Planned Behavior.³ The authors specifically mention the constructs of STD awareness, perceived risk, and reduction of stigma and fear. They mention, additionally, a goal that campaign messages would promote open communication with sex partners and providers, presumably about condom use and STD testing, although this is not explicit. The authors do not offer
a theoretical framework identifying how their constructs map to specific messages or message channels and what the anticipated relationship is between exposure to messages, decline in stigma, and decision to test, for example.

Although theoretical constructs from Health Belief Model and Theory of Planned Behavior are certainly widely demonstrated as having high impact on individual level behavior change, I submit that they are necessary but insufficient to inform the development of, encourage engagement in, and facilitate behavior change—in this case STD testing—in a modern campaign.

The authors themselves cite the 10-year retrospective work of Noar, which demonstrates clear links between consumer exposure to health promotion campaigns and behavior change. A review of these campaigns shows that they not only rely on addressing constructs such as self-efficacy, intentions, behavioral control, perceived benefits, and barriers from performing a behavior but also emphasize the importance of crafting messages themselves using theory. For example, attention to whether messages are gain or loss framed, or whether they are central or peripheral to individual values are 2 strategies with demonstrated efficacy for gaining and sustaining attention of those exposed.

Second, ubiquitous and continual access to the Internet via computers and mobile devices has come a deluge of information. It has become critical to identify strategies that can distinguish health campaigns so that people will not ignore them or fail to read or comprehend them if they do engage. Thus, initial and ongoing engagement with any campaign material is of high importance. The GYT team recognizes the importance of engagement in documenting evidence of the same, but what they do not attend to is a deliberate message design to capture and sustain attention while attempting to influence self-efficacy, intentions, and so on.

This represents what might be a typical lack of integration between the health communication and health behavior change fields, but also presents a new problem of how to make our messages stand out so that they will be read and acted upon when people may be continually overwhelmed with information and data. Jonah Berger, an Associate Professor of Marketing at the Wharton School, University of Pennsylvania, wrote Contagious: Why Things Catch On, in 2013, a study of why products ideas and behaviors “catch on” via social media and go viral. His book offers an intriguing consideration of theoretical constructs not only about what grabs the attention of an individual in the social media space but also what motivates them to share information, links, ideas, and so on, with others in their social network. Some of what Contagious suggests will motivate engagement, and sharing is not new. Berger suggests that messages will be more engaging if they trigger an important emotion such as anger or sadness, that it must be rational or logical, or that it should engender feelings of love in order for people to take notice. This is evocative of Plato’s tripartite theory of soul, suggesting that humans are motivated by strong emotions (spirit), to seek truth and learn (logic), and experience passion (appetite). Thus, some of these central ideas for creating messages that are provocative, are logical, or can evoke passion harkens to ancient philosophy. Berger emphasizes how data from social networks can be analyzed to facilitate understanding of behavior. For example, data mining currently allows us to understand whether there is a relationship between what people post to social media and individual and sexual risk behaviors. It is imperative then that we look to methods beyond randomized clinical trials for both economical and effective ways to quickly make appropriate assessments on the efficacy of our intervention efforts.

The “big data” movement continues to evolve, we will also be presented with new and unique opportunities to consider how data from social networks can be analyzed to facilitate understanding of behavior. For example, data mining currently allows us to understand whether there is a relationship between what people post to social media and individual and sexual risk behaviors. It is imperative then that we look to methods beyond randomized clinical trials for both economical and effective ways to quickly make appropriate assessments on the efficacy of our intervention efforts.

**THE INTEGRATION OF MULTIPLE AND BIG DATA SOURCES FOR EVALUATION**

Although methods to analyze GYT did not allow analysis of the relationship between exposure to the campaign and subsequent testing, the authors were able to access multiple data sources to evaluate testing during the campaign period and used commonly available analytic metrics to document engagement with their campaign media. By the second year of the campaign, there were close to 5000 Facebook and 2000 Twitter followers, respectively, and tens of thousands of referrals for testing from the STD Testing locator. The authors’ use of analytics offers a good example of the opportunities we have to quickly make assessments about campaign efficacy. The team fully acknowledges the limitations of their assessment and inability to draw conclusions about exposure to GYT and individual level testing behaviors. Although this is indeed a limitation, it is illustrative of an ongoing tension at the intersection of health behavior research and advances in social media technologies. Although there remains a need to rigorously evaluate our health promotion campaigns and interventions, doing so within the current systems and with traditional methodologies may well result in publication of efficacy data for campaigns that are obsolete, because they take so long to complete a rigorous trial, and new technologies emerge faster than our capacity to evaluate them. This concern has been considered by Riley et al., who point out that someone conducting a typical 5-year randomized clinical trial on a technology innovation starting in 2006 would miss the advent of the Wii, iPhone, Android system, and iPad. Riley and colleagues call for approaches that are used by those evaluating GYT, including the secondary analysis of existing data such as the analytics available on Google, and developing partnerships with agencies to review their data (e.g., data from nine Planned Parenthood affiliates reviewed in GYT).

As the “big data” movement continues to evolve, we will also be presented with new and unique opportunities to consider how data from social networks can be analyzed to facilitate understanding of behavior. For example, data mining currently allows us to understand whether there is a relationship between what people post to social media and individual and sexual risk behaviors. It is imperative then that we look to methods beyond randomized clinical trials for both economical and effective ways to quickly make appropriate assessments on the efficacy of our intervention efforts.

The GYT campaign exemplifies the promise for the future of 21st century health communication and health promotion. Theirs is an admirable effort to use a wide array of tools to facilitate awareness of and access to STD testing services, to consider approaches to integrate well tested theory into new campaign modalities, and to access and use big data to assess campaign efficacy. What GYT illustrates are new opportunities to use social media. We have the opportunity to align campaign activities more discretely with what consumers expect networks—can facilitate transmission of STD and that there are core transmitters within sexual networks who bear substantial responsibility for disease transmission. What we have not yet identified but may be able to now within the social media and social networking space is whether and how ideas about prevention can be spread within social networks. Theoretical models that integrate existing health communication and health behavior change theory with emergent theory on engagement in the social media space and theory on maximizing message sharing within social networks can offer much more sophisticated models of how to effectively use social and mobile media to influence behavior.
on differing social media channels—for example, we can make sure to use You Tube for demonstrations and Twitter for up to the moment status updates rather than sending the same message across different channels in monolithic fashion. We must begin to consider new ways to integrate multiple theoretical perspectives to effectively make our messages and intervention content engaging, and to make sure it can be effectively disseminated through social networks. Finally, we can embrace emergent analytic tools to more quickly and cost-effectively assess important outcomes that can point to campaign and program efficacy.

REFERENCES


