Expectations and Realities of Health Information Dissemination on Campus
Hello!

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1. Overview
The American College Health Association (ACHA) was established in 1920 with the aim of improving student health care on college campuses (ACHA, 2016).

ACHA’s Healthy Campus 2020 initiative “is a framework to support campuses in improving the health of their students, staff, and faculty” (ACHA, 2016a).
One of the initiative’s student objective is “improved and increased health communication” (ACHA, 2016b).

Health communication is defined by the National Cancer Institute (NCI, 2004) as “the study and use of communication strategies to inform and influence individual and community decisions that enhance health.”
ACHA Healthy Campus 2020
Health Communication Objectives
(ACHA, 2016b)

- Increase proportion of students who report that their health care providers have satisfactory communication skills.

- Increase the proportion of students who report receiving information on the following from their institution:
  - Injury prevention
  - Violence prevention
  - Suicide prevention
  - Tobacco use
  - Alcohol and other drug use
  - Pregnancy prevention
  - Sexually transmitted disease/infection (STD/I) prevention
  - Nutrition
  - Physical activity
For college students, the school, along with its health center, is an important source and gatekeeper of health information.

“The ability to choose the right message and the most effective communication medium starts with understanding the intended receiver” (Lanning & Doyle, 2010).

In order for a sender’s message to get to its intended recipient, the sender needs to use channels the recipient frequently utilizes and be presented in a style that the recipient responds to.
An Exploration Of Students’ Health Information Communication Preferences
According to Escoffery et al. (2005), college students want information on:
- Fitness/exercise (49.9%)
- Diet and nutrition (47.2%)
- Medicines and pharmaceuticals (39.6%)
- Alcohol and other drugs (31.7%)
- Sexual health (28.3%)
- Mental health issues (27.6%)
- Sexually transmitted diseases (24.9%)
- Other diseases (20.8%)
- Tobacco and smoking (19.2%)
- Provider, hospital, or health agency (14.8%)
- Sexual or physical abuse (6.3%)
- Violence (6.0%)
- Dating violence or rape (4.2%)

*Increase the proportion of students who report receiving information on the following from their institution:
- Injury prevention
- Violence prevention
- Suicide prevention
- Tobacco use
- Alcohol and other drug use
- Pregnancy prevention
- Sexually transmitted disease/infection (STD/I) prevention
- Nutrition
- Physical activity
Use of Health Information Source (ACHA, 2008)

- Religious Center
- Resident Assistants/Advisors
- Campus Peer Educators
- Campus Newspaper Articles
- Faculty/Coursework
- Television
- Leaflets, Pamphlets, Flyers
- Magazines
- Health Educators
- Health Center Medical Staff
- Friends
- Parents
- Internet

Use Source
Use and Believability of Health Information Source (ACHA, 2008)

- Religious Center
- Resident Assistants/Advisors
- Campus Peer Educators
- Campus Newspaper Articles
- Faculty/Coursework
- Television
- Leaflets, Pamplets, Flyers
- Magazines
- Health Educators
- Health Center Medical Staff
- Friends
- Parents
- Internet

Source: ACHA, 2008
Background

- A survey of online health resources supplied by US colleges showed a gap between student health information needs and health information provided (Jue & Metlay, 2011).
  - Quit using tobacco products (provided by <10% of colleges)
  - Exercise and nutrition (provided by <10% of colleges)

- Healthcare providers should direct patients to trustworthy sources of health information online (Shepperd et al., 1999).
Aim

- To fill the gap between believability and use for health center staff and simultaneously achieve Healthy Campus 2020 Health Communication goals,
  - I decided to create Healthy Hounds – a centralized resource portal and authority on all things Health and Wellness at Loyola

- To determine the type and style of content to put on Healthy Hounds, I wanted to explore students’ behaviors in seeking, acquiring, and using health and non-health related information both online and offline.
**Methods**

- 1<sup>st</sup> focus group (conducted Nov 11, 2015), $50 Amazon raffle
- IRB approval from Loyola University Maryland
- **Make up of group**
  - n = 7 (Nielsen, 2000)
  - 100% in 18-20 age group
  - 5 females, 2 males
  - All single
  - 1 in-state
  - No international student
  - 100% live on campus
  - All have health insurance
- **Questions aimed to uncover:**
  - Students’ preferred types and styles of websites and modes of information presentation
  - The type of health and wellness information students seek and sources they use
  - Students’ likes and dislikes about the current websites for the health and wellness centers
  - Students’ imaginations of the ideal health and wellness communication resource
Preferred types and styles of websites and modes of information presentation

- **Connection**
  - Content that evoke emotions
  - Catchy content titles: Buzzfeed
  - Social media sites: Facebook, Instagram

“Did you watch that (inaudible) video today? It's six minutes long. I was hysterical crying!”

- Respondent X
Preferred types and styles of websites and modes of information presentation

- Convenience
  - Short and/or bulleted articles
  - Mobile access: phones + laptops
  - Content available on demand

“I scroll down to see like how long it is and if its long, then I don't but if it's short then I'm like okay, I'll read it.”

- Respondent 7
Preferred types and styles of websites and modes of information presentation

- **Care**
  - Site participants are non-judgmental
  - Content is presented in an emotionally appropriate manner
  - Content fills a need for the user

“Tumblr can get pretty scary. People are very opinionated.”
- Respondent 4
**Types of health and wellness information sought and sources used**

- **Connection**
  - Most used sources have a high degree of connection
    - Past experiences
    - Parents
    - Other internet users

  “Or like a Yahoo! Answers will have something that's exactly what you are talking about.”
  - Respondent 7
Types of Health and Wellness Information Sought and Sources Used

- **Convenience**
  - The more convenient a source is, the more likely it is used
    - WebMD
  - Perceived credibility of online resources are based on attributes students find convenient

“I usually call my mom.”
- Respondent 3
Types of health and wellness information sought and sources used

- **Care**
  - Remedies for various pains, injuries, and illnesses
  - Fitness & nutrition info
  - Health and Wellness professionals provide the best care but are the last resort sought

“[Dad] just was like “Okay, go to sleep, you'll feel like better in the morning.” and turns out my rib popped out of the cartilage. [Laughs]
- Respondent 6
Likes and dislikes about the health and wellness centers’ current websites

- **Connection**
  - Poor job of catering to needs of current students

  “There should be a separate website for the students already attending the school and a website for the people that want to view the school...like prospective students.”
  - Respondent 2
Likes and dislikes about the health and wellness centers’ current websites

- **Convenience**
  - Needed information is not presented in an easily accessible manner
  - Information provided do not eliminate steps or provide final calls to action on information sought

“Yeah, I had a hard time finding hours too (…) it’s like, you have to press certain pages and then I went back to Google to see if I could search something else and maybe it will come up.”

- Respondent 6
Likes and dislikes about the health and wellness centers’ current websites

- Care
  - Content needs to be relevant and updated

“Looks like the website had 2003.”
- Respondent 4
Imagining the ideal health and wellness communication resource

- **Connection**
  - Use social media to connect with students
  - Secure online chat/messaging
  - Call, IM, text or Skype health professional directly

“Well, they are very nice people; I think that they should reflect it on their, their pages and stuff.”
- Respondent 6
Imagining the ideal health and wellness communication resource

**Convenience**
- Easily scheduled appointments online like The Study
- Portable, mobile-friendly information

“Dorm room visits by a doctor but that's not happening.”
– Respondent 2
Imagining the ideal health and wellness communication resource

- **Care**
  - SHC should care about them as current students and this should be reflected in all types of communication they put out

  “Just make everything easier rather than having to work so hard for it ‘cause at least I’m pretty lazy!”
  - Respondent 4
In his bestselling book, *The Tipping Point*, Gladwell (2013) describes an experiment that improved the tetanus vaccination rate among college seniors at Yale University by 25% in the 1960s.

As this study confirms, students prefer to be met a little more than half-way and resources provided should bridge the gap from knowledge to action: Little meaningful changes go a long way.

Website updates and online resources provided should be based on the themes of connection, convenience, and care.
Keep it simple and professional! (Nielsen, 2010; Fergie et al.’s 2013; Buhi et al. 2010)

Keep it engaging and emotive! (Prybutok & Ryan, 2015)

Keep the lines of communication open! (Buzi et al., 2013; Wynn et al., 2009)
So... are SHCs meeting students’ needs when communicating health information online?
An Exploration of the use of Digital Media Channels to Communicate Information about the Zika Virus
Background

- 65% of individuals aged 18–29 years use the internet as their main news source (Kohut, Doherty, Dimock, & Keeter, 2011).
  - Social media is fast becoming a go-to-source for information on a variety of issues including health (Westerman, Spence, & Van Der Heide, 2014).

- 92% of people aged 18–29yrs old use social media (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015).
  - Students spent about 27 minutes/ day perusing social media sites on their computers* compared 3.5 minutes/day using search engines (Junco, 2014).
College students turn to social media to get health information (Oh & Kim, 2014).

Social media was the 2nd most common source of Zika information (21% of all Americans) with other internet-based sources (CDC, 13%, WebMD & others, 15%) following (Titus et al., 2016).

43% of Americans aged 18–29 years were aware of the Zika virus and only 53% of these Zika-aware individuals knew that Zika could be sexually transmitted (Titus et al., 2016).
Ariana Gomez (@arianachantelg) tweeted, “Zika is ruining my Spring break plans to go to Puerto Rico and I AM NOT HAVING IT.” And Becca B. (@beccabyrd_isfly) said, “This whole Zika virus ruining my spring break possible travel itineraries.”

The report from Texas that the case there was contracted through sex was not missed on Twitter. Proctor Pyrex (@GoldLabel__) tweeted that people would start checking passports before having intercourse.
Background

- Differences in learning about Zika via search engine vs social media.

- Role of information gatekeeping and filter bubbles in social media and online search (Nikolov, Oliveira, Flammini, & Menczer, 2015, Pariser, 2011, Leetaru, 2016).

- Colleges and health centers are both sources and gatekeepers of health information for the campus community (Deluliis, 2015).
  - Catholic colleges and sexual health information re: Zika
Aim

- In order for a sender’s message to get to its intended recipient, the sender needs to use channels the recipient frequently utilizes.

- To determine if Baltimore City area universities and their Student Health Centers communicated information about the Zika Virus and its disease using students’ preferred channels, I wanted to find out if
  - Schools and/or their SHCs mention “Zika” on their websites
  - Schools and/or their SHCs mention “Zika” on their social media
Methods

➤ A quasi-experimental analysis of online digital media properties of Baltimore City* area colleges was conducted Apr–May 2016
  ▪ For Zika mentions on the landing page of the school and Student Health Center websites, the browser’s search function was used to find the term “Zika”
  ▪ For Zika mentions on Twitter, each school’s or their student health center’s @username along with the term “Zika” was entered in the Twitter search bar and “Live” results were viewed
  ▪ For Zika mentions on Facebook, each school’s or their student health center’s Facebook page’s search function was used to find the term “Zika” in their posts

➤ The presence (√) or absence (×) of the term on each site was recorded. The quantity of mentions was not taken into account.
Expectation ≠ Reality
Results

Website - College

Have Websites: 100%
Mention Zika: 20%
Results

Twitter - College

Have Twitter Accounts: 100%
Mention Zika: 40%
Results

Facebook - College

Have Facebook Pages: 100%
Mention Zika: 20%
## Zika Mentions on Colleges’ Main Digital Media Pages

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</tbody>
</table>

Y = Yes | N = No | *Non-Baltimore City School
How to protect yourself from Zika virus while traveling to affected areas

Hopkins Medicine expert on how to guard against Zika virus while traveling to affected areas

hub.jhu.edu

Tips if you’re traveling to affected areas, particularly in South and Central America.
Results

Website – Student Health Center

Have Websites 90%  Mention Zika 44%
Results

Twitter - Student Health Center

Have Twitter Accounts: 20%
Mention Zika: 50%
Results

Facebook - Student Health Center

Have Facebook Pages: 20%
Mention Zika: 100%
# Zika Mentions on SHCs’ Digital Media Pages

<table>
<thead>
<tr>
<th>School</th>
<th>Health Center Website?</th>
<th>Zika Mentioned?</th>
<th>Health Center Twitter?</th>
<th>Zika Mentioned?</th>
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</tr>
</tbody>
</table>

Y = Yes | N = No | *Non-City Schools | **Outsourced to private provider | ***General feed for private provider
UMBCuhs
@UMBCuhs

The CDC has issued a travel advisory for parts of the Caribbean and Central & South America regarding the Zika... fb.me/LmR19e9D

9:01 AM - 26 Jan 2016
1 Like

UMBC University Health Services
January 28, 2016

The CDC has issued a travel advisory for parts of the Caribbean and Central & South America regarding the Zika Virus. http://bit.ly/XDKrIB

CDC Travel Health Notices for Zika Virus

CDC Media Statement (Jan. 26, 2016): "CDC is working with other public health official to monitor for ongoing Zika virus transmission. Today,...

Johns Hopkins University

Tips if you’re traveling to affected areas, particularly in South and Central America.

Johns Hopkins U. @JohnsHopkins · 29 Feb 2016
From @HubJHU: How to protect yourself from Zika virus while traveling to affected areas

How to protect yourself from Zika virus while traveling to affected areas

How to guard against Zika virus while traveling to affected areas

hub.jhu.edu

Johns Hopkins University

March 1, 2016

How to protect yourself from Zika virus while traveling to affected areas

Hopkins Medicine expert on how to guard against Zika virus while traveling to affected areas

HUB.JHU.EDU
“Concise information is really, really important. For example, when you pull up the website, even an hours were in a block paragraph format, I’ve never like, I would HATE to dig through for the hours.”

- Respondent 4

“Yeah. Usually what I would do is if I first see an interesting title, I scroll down to see like how long it is.”

- Respondent 7
“Bullets! [Group: Yeah!!!] ...and you could read like the bold part and then kinda scan through the little paragraph that it has underneath that's usually what draws people in.”

- Respondent X
<table>
<thead>
<tr>
<th>School</th>
<th>Website Zika Mention Tally</th>
<th>SM Zika Mention Tally</th>
<th>Overall Zika Mention Tally</th>
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</table>
A student attending a big research university (UMBC, GU or JHU) is more likely to hear about Zika via the school’s online resources (websites + social media) than students attending other schools.

Sharing health information on the school’s main website and social media channels is also ideal as these school-wide platforms tend to have more subscribers than narrower departmental platforms.

Limitations

- Twitter has its own filters and algorithms for searches (Twitter, n.d.).
- Content of landing pages are not static.
Mix it up! (Kaplan & Haenlein, 2010).

Go where your audience is: Facebook & Instagram (Junco, 2014; Robinson, 2015; Watts, 2015; Duggan, Ellison, Lampe, Lenhart, & Madden, 2015).

Engage students by tapping into their “unvoiced” inquiries. (Black, Mezzina, & Thompson, 2016).
**Application**

- Make your message impactful!
  - **Phares (2016)** curated websites with engaging visual content about the spread of the Zika virus.
  - **Rettew (2016)** gives great tips on how to design your messaging on the Zika outbreak (or other health issues) to have maximum impact.

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**Zika virus**

Zika is primarily transmitted through the bite of infected Aedes mosquitoes. It can also be transmitted from a pregnant mother to her baby during pregnancy.

- Reported transmissions

**Symptoms**
- Fever
- Rash
- Joint pain
- Conjunctivitis (red eyes)

**Birth defects**
The Zika virus has been found in many infants born with microcephaly. This condition causes a baby to have a smaller head and can cause developmental issues ranging from mild to severe.

**Brazil microcephaly cases**
The number of reported microcephaly cases in Brazil has risen from 2,301 to 2,311 from 2014 to 2015.

- 153 cases in 2010
- 139 cases in 2011
- 175 cases in 2012
- 167 cases in 2013
- 147 cases in 2014
- 3,530 cases in 2015

**Aedes mosquito**
Distinctive for their black and white markings, this mosquito is the most prominent species to transmit the viruses that cause dengue fever, yellow fever, West Nile fever and the Zika virus.

- Average lifespan: 2 weeks
- Diet: Bloodmeal, nectar, juice
- Peak activity: Dawn and dusk
- Region: All continents except Antarctica

Source: CDC, Brazil Ministry of Health, National Environment Agency
Why are SHCs not meeting students’ needs when communicating health information online?
An Exploration of Digital Strategies used by Student Health Centers for Health Communication
Aim

- To determine how Student Health Centers of US universities communicate health information to their student audience, I wanted to find out the following:
  - How do school SHCs communicate health information?
  - Do school SHCs use social media for health communication?
    - If so, how and for what do they use it?
    - If not, what are the barriers for adoption?
Methods

- An online survey was shared to the ACHA SHS listerv (conducted Jul 2017)
- Survey was open for 2 weeks
- Of 121 respondents, 71 completed the survey
- Survey questions addressed the following:
  - Attitudes to Health Communication
  - Attitudes to Social Media
  - Attitudes to Use of Social Media for Health Communication
- Data analysis in progress
For college students, the school, along with its health center, is an important source and gatekeeper of health information.

“The ability to choose the right message and the most effective communication medium starts with understanding the intended receiver” (Lanning & Doyle, 2010).

- For message design and distribution that the recipient responds to, employ the themes of Connection, Convenience, & Care
- In order for a sender’s message to get to its intended recipient, the sender needs to use channels the recipient frequently utilizes: Don’t neglect social media
THANKS!

Any questions?

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