RIDING THE HEALTH COMMUNICATION WAVE: IS IT A TSUNAMI OR LOW TIDE?

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Is this health communication?
Or is this health communication?
National Health Communication Priorities

Health Communication and Health Information Technology

- **HC/HIT-1**: Improve the health literacy of the population
- **HC/HIT-2**: Increase the proportion of persons who report that their health care providers have satisfactory communication skills
- **HC/HIT-5**: Increase the proportion of persons who use electronic personal health management tools
- **HC/HIT-9**: Increase the proportion of online health information seekers who report easily accessing health information
- **HC/HIT-12**: Increase the proportion of crisis and emergency risk messages intended to protect the public’s health that demonstrate the use of best practices
Health Communication Scholarship is Growing

Publications per year with “health communication” in title or abstract per Google Scholar
New Definitions of Health Communication

Health communication is the science and art of using communication to advance the health and well-being of people and populations (SHC, 2017)
New Definitions of Health Communication

Health communication is a multidisciplinary field of study and practice that applies communication evidence, strategy, theory, and creativity to promote behaviors, policies, and practices that advance the health and well-being of people and populations (SHC, 2017)
If health communication can reduce morbidity and mortality, why isn’t it more accepted and utilized in healthcare and public health? Because it often isn’t very effective!
Most “health campaigns” are not designed to be “behavior change” campaigns.
A Meta-Analysis of the Effect of Mediated Health Communication Campaigns on Behavior Change in the United States (Snyder et al., J Hlth Com, 2004)

• Reviewed 48 campaigns, total n=168,362
• Mediated health campaigns have small short-term effects
  – The average media campaign effect on behavior was $r = .09$, with a 95% confidence interval of .07 to .10.
  – Effects ranged from $r = .04$ for sexual behaviors to $r = .09$ for alcohol use reduction to $r = .15$ for seat belt use
• Campaigns with an enforcement component were more effective
• Conclusion: Given the small campaign effect sizes of previous campaigns, planners should set modest goals for future campaigns
Designing Effective Health Communications:
A Meta-Analysis (Keller & Lehmann, JPPM, 2008)

• A meta-analysis of 60 health communications studies involving nearly 22,500 participants
  – Examined the influence of 22 tactics (e.g., fear, framing) and 6 individual characteristics (e.g., age, involvement) on intentions to comply with health recommendations
  – Examined when message tactics interact with individual characteristics to determine intentions
• Found that message tactics have a significant influence on health behavior intentions even after controlling for individual differences
  – Strong effects of case information, social consequences, other referencing, female communicators, detection behaviors
  – Untailored framing and exclusively-emotional appeals are “not advisable”
What Makes an Effective Health Campaign?

- Goals and objectives
- Audience analysis
- Theory and models
- Creative development
- Distribution strategy
- Extensive pretesting
- Implementation
- Analytics and analysis
- Evaluation and revisions
Effect of the first federally-funded US antismoking national media campaign (McAfee et al., Lancet, 2013)

- “Tips from Former Smokers” contained hard-hitting emotionally evocative TV ads
- 3-month campaign cost $54M
- Quit attempts rose 12% over baseline
- ≈1.64M smokers made quit attempts
- ≈220K remained abstinent at follow up
- ≈$200 per year of life saved!
Health Communication Campaigns

• Campaigns require sufficient time, resources, and especially expertise to implement correctly and effectively.

• Campaigns that fail to follow the full health communication planning model are more public relations (awareness) than public health (behavior and/or policy change)

• Under-resourced and ineffective health campaigns actually undermine the perceived value of health communication
Health communication interventions and messages have a **dose-response** effect

- An ideal level of potency is required to achieve efficacy
- Under-dosed or over-dosed treatments have consequences
- Principle applies to individual and population level interventions
How complex are these behaviors?

What “dose” of intervention is needed to have an impact?
What Determines the Required Level of Health Communication Dose? (for Individuals and Populations)

- Exposure level
- Message receptivity
- Message intensity
- Message interactivity
- Habits and/or addictions
- Environmental context

• Exposure had a strong positive correlation with average effect size \( (r=0.47, k=41, n=119,580) \)
• Therefore, exposure is a necessary but not sufficient condition for change in the target population
• Low exposure leads to low or no effects, and most campaigns (48 reviewed) had very low exposure
Health Communication Dose-Response

• Every health communication intervention and campaign ever conducted to date was probably under-dosed

• Insufficiently dosed campaigns and interventions are a waste of time, money, energy, and effort and are ethically questionable in a time of limited resources

• Insufficiently dosed campaigns actually **undermine** the perceived value of health communication
Are digital, social, and mobile media the “game changer” we have been seeking?

Smartphones, Tablets Grew in Recent Years; Other Devices Declined or Stayed Flat

% of U.S. adults who own the following devices

App Downloads and Revenue

Mobile-Based Healthcare (mHealth)

- > 165,000 health-related apps
- Potential for growth
- Almost no evidence for efficacy to date

Source: research2guidance, 808 apps from Apple App Store, Google Play, BlackBerry App World and Windows Phone Store (March 2014)
Head, K.J., et al. (2013) Efficacy of text messaging-based interventions for health promotion: A meta-analysis, SSM.

- Overall weighted mean effect size was $d = 0.329$ ($p < 0.001$): “small to medium magnitude“
- Smoking cessation and physical activity most effective
- Tailoring and personalization improved outcomes
- Individualized or decreasing message frequency worked better than using a fixed message frequency

- Reviewed 15 systematic reviews and meta-analyses
  - Explored 89 individual studies using SMS for public health
  - SMS-based interventions were effective for: diabetes, weight loss, physical activity, smoking cessation, medication adherence for ART
  - Limited consistent evidence across studies and reviews to inform recommended intervention characteristics
  - Additional research needed to establish: longer-term intervention effects, best intervention characteristics, cost-effectiveness
Digital and Mobile Health Communication

• More research and evaluation needed, especially on social media and reducing health disparities
• Instead of apps, focus on responsive web design and mobile messaging, especially tailored SMS
• Simplify complex interventions (e.g., tailoring) so effective methods can easily be brought to scale
High Quality SMS-based mHealth Programs
If we focus more on (a) best-practice fidelity, (b) intervention dose, and (c) scaling up what works, we can ride the health communication wave far into the future and improve health.

If not, the tide will go out and support for the field will dry up.
THANK YOU

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2nd Annual Health Communication Summit
- May 22, 2018 Bethesda, MD
- http://HCSociety.org