The Alcohol and Breast Cancer Connection

Exploring Messaging and Communication Channels that Resonate with Undergraduate Women

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Funding by the WCH Women’s Xchange $15K Challenge
Received Women’s Xchange $15K Challenge funding because:

1. **General population not very aware** of causal association between alcohol and female breast cancer (4-10% all cases; higher < 45yrs)

2. **Undergraduate females 18-22 may be at increased risk:**
   - Breast tissue potentially more vulnerable to carcinogens during stages of rapid development
   - Potentially higher alcohol consumption patterns than any other time of life

3. **Strategic opportunity** to potentially mitigate harmful drinking patterns by connecting to a health issue of concern to women
Methods

- Partnered with **University of Waterloo** (Health Promotion and Campus Wellness) to develop and test concept messages to increase awareness and influence intentions.

- **Focus group study** *(summer/fall 2017)* to understand effective messaging and communication channels for undergraduate females *(Eligibility: enrolled, 18-22 years, drink alcohol)*

- Students recruited from **UW, Laurier U, and Conestoga College**

- **Three concept messages** developed and tested across four focus groups

- **Knowledge/beliefs** about alcohol and breast cancer connection and impact a connection would have on **intentions** around current and future drinking assessed before and after the focus group session *(pre/post-test)*
Closed- (anonymous clickers used) and open-ended questions

Knowledge/beliefs and intentions were measured with closed-ended questions

Concept messages/ads were tested for their impact on attention, comprehension, motivation, cultural relevance, and appropriateness

Analyses included percentage tabulations, thematic analysis, and difference of proportions
DID YOU KNOW?

Alcohol is a carcinogen that can cause breast cancer.

IF YOU CHOOSE TO DRINK, THINK NO MORE THAN ONE AND BE DONE.
To learn what “a standard drink” is and how to reduce health risks visit, www.rethinkyourdrinking.ca

DID YOU KNOW?

Less than one standard drink every day can increase lifetime risk.

DID YOU KNOW?

One standard drink is less than you think.

DID YOU KNOW?

Alcohol & breast cancer: the more you drink, the greater your lifetime risk.

As little as three standard drinks per week has been shown to increase the risk.

Even if you stop drinking later, drinking patterns now raise your risk forever.

DID YOU KNOW?

Drinking alcohol is a causal risk factor for breast cancer.

DID YOU KNOW?

The more you drink over your lifetime, the greater your risk.

It’s not just heavy drinking — even less than one standard drink a day can increase your risk.

SHARE WITH ALL THE WOMEN IN YOUR LIFE WHAT A STANDARD DRINK IS AND TIPS FOR LOWERING RISK AT:

Every drink is a choice.

How much you drink now matters later.

Cheers to women making good choices about alcohol.
What did we learn?: Demographics

- 90 students responded to the call for subjects; 80 met eligibility requirements
- n=31
  - mean age 20.25 yrs
  - 29% lived on campus, 52% lived off-campus, 19% lived at home
  - most students from UW (n=22)
  - various fields of study: health studies, nursing, psychology, engineering, and environmental sciences
  - No Hx of 1st degree female relative with breast cancer; 1/3 had Hx of 2nd degree
Poll question: Which concept message/ad do you think was ranked most preferred most frequently by the study group?

1) Every drink is a choice
2) How much you drink now matters later
3) Cheers to women making good choices about alcohol
What did we learn?: Overall Preference

- Every drink is a choice: 67.8%
- How much you drink now matters later: 87.1%
- Cheers to women making good choices about alcohol: 33.3%
### How did ads rate with respect to message attributes?

<table>
<thead>
<tr>
<th>Message/Ad</th>
<th>Attention/ Memorable</th>
<th>Comprehension</th>
<th>Motivation/ Call to action</th>
<th>Relevance/ Believable</th>
<th>Appropriateness/Reflection of values/traditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every drink is a choice</td>
<td>#3</td>
<td>--</td>
<td>#2</td>
<td>#3</td>
<td>#3</td>
</tr>
<tr>
<td>How much you drink now matters later</td>
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<td>#1</td>
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<tr>
<td>Cheers to women making good choices about alcohol</td>
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Based on answers to closed-ended opinion polls assessing the attributes; no closed-ended questions assessed comprehension.
What did we learn?: “Attention”

Design Features

• Very positive reaction to colour schemes and use of speech bubbles

Emotional Response

• The word “carcinogen”; some were shocked and surprised:

  “What’s memorable for me is that alcohol is a carcinogen. I have never heard of alcohol being called that. So when I read that I was shocked.”
What did we learn?: “Comprehension”

Clarity
• Connection between alcohol and breast cancer not obvious at first
• Some confusion, i.e., “Cheers to women...” message
• Misread “causal” as “casual” which completely changed meaning

Design Features
• Students suggested using a pink colour scheme or pink ribbon to make connection clearer or use the female form in some way

“I always think of the colour pink when I think of breast cancer.”
What did we learn?: “Motivation”

Intention to Act

- Reducing risk vs. abstaining
- Trying out an app

“I like the app, how it’s saying you can track your drinking, reduce your risk. So, it’s helping you think about what you’re drinking, you know, keep track of it, make sure you’re not going overboard.”

Emotional Response

- “How much you drink now matters later” tagline promoted contemplation/self-reflection

“Yeah, it definitely reminds me of the last time I went out...forces me to think of [it], without even reading anything else.”
What did we learn?: “Motivation”

Credibility
• Need risk statistics that convey a high enough level of risk to care ("30% or more")

“I still wish there was, like, how much risk, is it 2% or 50% increase and how worried should I be about how much I drink now?”

Relatability
• Not motivated to respond to message saying “drink less than one drink a day to reduce risk,”

“If you think about a university student and a young adult, they more so binge their drinking into a couple days of the week as opposed to something moderate every single day. Like, having a glass of wine every single day isn’t probably the way that they consume their alcohol.”
What did we learn?: “Relevance”

Relatability

• Critical to accurately reflect **where, how, or what they drink:**
  • They related *Every Drink is a choice* image to a “…*middle-aged mother who has a glass of wine every night at home*” vs. image of young woman in a bar, drinking a mixed drink, and wearing a choker, deemed to be “very in,” was very relatable.

• Importance of the **type of alcohol** featured:
  “…*the younger age group you usually have a cocktail, or like, you’ll have shots or something.*”

• References to a drink per day not relatable; **drinks per week, more relatable**
What did we learn?: “Appropriateness”

Emotional Response

• “Every drink is a choice” concept—“aggressive, blaming, and judgemental.”

• Lack of ethnic diversity in images

  “I feel like some people might find it offensive [cause] I noticed that in the two ads with people it’s only white people...You know, you want to feel inclusive to people of different demographics.”

Design Features

• “Confetti” was disliked; made light of a serious nature of the topic:

  “I feel like I’m still a bit confused on the confetti. I don’t know if that’s just like to signal the party vibe of our generation [...] it still is confusing me, because we are still talking about a serious topic.”
Testing: Part 2

- Recruited small group of study participants (n=6) to provide feedback on two revised messages.
- New test ads incorporated many suggestions, but were different enough to confirm the elements that resonate the most.

**Alcohol and Breast Health...**

How much you **drink** now matters **later**.

**DID YOU KNOW?**

- The more you drink over your lifetime, the greater the **risk of breast cancer**.
- 8 standard drinks a week, before first pregnancy, may **increase** breast cancer risk by over 30%.
- Even if you stop drinking later, the **harmful effects** of drinking during your teens and 20’s last.

**Drinking patterns now raise your breast cancer risk forever.**

**DID YOU KNOW?**

- Alcohol is a **carcinogen** that fuels estrogen which drives the growth of breast cancer cells.
- 8 standard drinks a week, before first pregnancy, may **increase** breast cancer risk by over 30%.
- Even if you stop drinking later, the **harmful effects** of drinking during your teens and 20’s last.

**EVERY DRINK, AT ANY TIME COUNTS. USE THE FREE “SAVING WHEN” APP TO TRACK YOUR DRINKING AND REDUCE YOUR BREAST CANCER RISK.**

www.sayingwhen.com

**THE LESS YOU DRINK OVER YOUR LIFETIME, THE LOWER YOUR RISK. LEARN MORE AND SHARE THE FACTS:**

Final Versions

Alcohol and Breast Health...
How much you drink now matters later.

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What did we learn?: “Communication Channels”

- Total consensus achieved: **social media is the best channel**— *Instagram* was the most commonly mentioned platform followed by Snapchat and Facebook.

- Participants said *strategically placed posters could also be very useful*:
  - High-traffic areas on campus not competing with other posters: outside of lecture halls, inside bathroom stalls, in elevators, campus residence buildings
  - Places on- and off-campus where alcohol can be consumed and/or purchased.
"Which of the following messengers would have the most impact on you regarding making behavioural changes to reduce health risks, such as those associated with breast cancer?"

![Bar chart showing percentage of participants]

- Doctor, nurse practitioner: 54.8%
- Friend/peer: 22.6%
- Mother: 16.1%
- Celebrity: 3.2%
- Other: 3.2%
What did we learn?: Knowledge/Intentions

After focus group participation and a brief 10 minute educational session:

Participants *significantly increased knowledge* that:
• Among nutrition and lifestyle factors, alcohol consumption has the most significant association with breast cancer
• Level of scientific evidence supporting a causal association is “strong”
• That any amount of alcohol consumed most days of the week can increase risk (not just heavy drinking)

*With regard to changes in intention:*
• Significantly more participants said: “If I thought that consuming alcohol is a risk factor for developing breast cancer over my lifetime, it would influence whether or not I choose to drink and how much I drink now and in the future.”
• Significantly fewer said this knowledge would not affect their drinking now or later, or not now but maybe later when older
1. Need for **immediate clarity** about the connection between alcohol and breast health (busy students, no time to ponder on the fly when in poster format!)

2. Design features such as **colour** tone (pink) and information arrangement (i.e., **speech bubbles**) very important to grab initial attention: "...gets the conversation going."

3. Critical to **ensure relatability** to specific audience when choosing **images, framing risk**, and proposing a call to action in ads:
   - who’s drinking? **what** are they wearing and drinking? **where** are they drinking?
   - does it relate to **how much and when** I drink?, (e.g., is it asking me to consider reducing or abstaining?)
4. **Numerical relative risk statistics** must be used to convey credibility
   • Should be **significantly large** enough as defined by audience to influence intentions to reduce risk

5. Use **words that elicit a more serious emotional response** such as the
   word “**carcinogen**” instead of “causes cancer”

6. Resources/tools featured to assist with reducing risk must be **easy to remember and access**, such as a free app logo vs. a website URL.
Implications for Message Delivery

1. Develop messages/ads adaptable to post via social media, in particular **Instagram** (GIF, or multiple static messages over a defined period of time)

2. **Post print ads in strategic locations on campus** (outside lecture halls, elevators, bathroom stalls, pubs, residence halls) and **off campus where alcohol is purchased or consumed** (i.e., similar to health messages about risk during pregnancy)

3. Advocate **campus primary care providers** to routinely screen for alcohol consumption and initiate conversations about cancer risk (posters in exam rooms, provide handouts, etc.)
1. **Awareness ads** printed and ready to be posted on campus

2. A GIF version of the ad created for social media

3. **Promotional items** (i.e., scroll pens and lip balms) with an accompanying info palm card
   - Soon to be distributed to campus health services **primary care providers**, **women’s sports teams and clubs**, and at **student health fairs** on campus
   - Potential to include in **freshman packets** in the fall if residence life interested
To learn more…

- Project video link  [https://vimeo.com/252223457](https://vimeo.com/252223457)
- Video summarizes the project in a very dynamic, informative way.
- Let us know what you think and if you share it with colleagues as a knowledge exchange tool.
Questions?

Thank you for participating today!!