Toward a Consumer Health Information Behavior Model of Health Injustice

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Consumer Health Information Behavior

- Umbrella term encompassing people’s health-related information needs and the activities in which they engage (or not) in order to seek, assess, manage, use, etc. health-related information.
Health Justice

• Every individual is morally entitled to “a sufficient and equitable capability to be healthy” (Venkatapuram, 2011, p. 20).

• Still far from achieving this ideal with significant disparities in life expectancy based on:
  - Income
  - Educational attainment
  - Race

• These disparities are only continuing to increase over time
Demographic Factors (income, race, educational attainment, etc.)

?: CHIB likely plays a mediating role between individuals’ demographic factors and health outcomes.

Health Trajectory / Quality of Life / Health Outcomes
The Study: Research Questions

• RQ1: How prevalent is information avoidance among U.S. adults?

• RQ2: What types of demographic, information-seeking, cognitive/perceptual, and social factors are associated with information avoidance?
The Study: Methods

- Secondary data analysis
  - U.S. National Cancer Institute’s (NCI) 2014 Health Information National Trends Survey (HINTS)
  - HINTS 4 Cycle 4 SPSS data set (https://hints.cancer.gov/)
  - Final n = 3,677 (34.6%)
  - Data Collection period: 8-11/2014
  - Data Analysis: Cross-tabs; Chi-square tests of independence
Participants

- N = 3,677
- Gender:
  - 60% F (n = 2,184)
  - 40% M (n = 1,424)
- Age: 18-98 [M (SD) = 51.9 (21.17)]
- Race/Ethnicity:
  - 60% Non-Hispanic White
  - 17% Hispanic
  - 16% Non-Hispanic Black/African-American
  - 7% Other
Findings: Prevalence of Info. Avoidance

1: Strongly Agree
375
10%

2: Somewhat Agree
734
21%

3: Somewhat disagree
911
26%

4: Strongly disagree
1,521
43%

How much do you agree or disagree with this statement: “I'd rather not know my chance of getting cancer”?

“Information Avoiders”: 1,109/3,541 (31.3%)
Findings: Demographic Differences

- Older age
- Lower educational attainment
- Lower household income
- Unemployed, disabled, retired (vs. employed, homemakers, or students)
- No health care coverage
Findings: Demographic Differences - Age

- 18-34: 29.8%
- 35-49: 28.0%
- 50-64: 34.8%
- 65-74: 33.6%
- 75+: 36.7%
Findings: Demographic Differences - Education

- Less than 8 years: 46.7%
- 8-11 years: 38.5%
- 12 years/high school: 42.8%
- Post high school training: 34.5%
- Some college: 33.3%
- College graduate: 26.0%
- Postgraduate: 25.8%
Findings: Demographic Differences: HH Income

- Less than $20,000: 39.9%
- $20,000 - $35,000: 33.5%
- $35,000 - $50,000: 34.2%
- $50,000 - $75,000: 31.8%
- $75,000 or more: 25.0%
Additional Factors Correlated with Information Avoidance

- Never go online
- No broadband access
- No tablet, smartphone
- No health apps
- Not used Internet re: cancer
- Never looked for health information from any source
- Encounter barriers if did seek cancer information:
  - Search took a lot of effort
  - Felt frustrated during the search
  - Information was hard to understand
  - Concerned about info. quality
- Less trust toward doctors, government health agencies, and the Internet
- Lower health- & information-related self-efficacy
- Report less social support
  - No regular healthcare provider
  - No friends/family they can talk to about their health
- Feel more fatalistic
  - Health behaviors don’t matter
  - Limited control over weight/smoking
  - Quitting smoking won’t help
  - “It seems like everything causes cancer”
Consumer Health Information Behavior Model of Health Injustice

- We propose a new CHIB model of health injustice to explore potential links between CHIB and health injustice.
  - How might CHIB mediate the relationship between demographic (and other types of) factors and health injustice?
  - How might we use this information to identify potential contributory (and thus, potential solution) pathways for preventing/reducing health injustice?
1. Individual Factors:
- Demographics
  - Older age
  - Less education
  - Lower HHI
  - Unemployed, disabled, or retired
  - No health coverage
- Computer/Internet access and use
  - Do not use Internet
  - Do not own tablet, smartphone, basic cell phone
- Low self-efficacy
- Limited health/information/digital literacy
- Less likely to look for health information
- Have encountered barriers during any prior health-related information seeking
- Less trust toward health information sources (doctors, Internet, and government agencies)
- Less social support
- Prefer non-collaborative decision-making
- Feel more fatalistic

2. CHIB PROCESS:
- Incognizance
- Information Need Identification / Articulation
- Information Seeking (or avoidance)
- Information Comprehension / Assessment / Management
- Information Incorporation / Adaptation / Use (or non-use)

3. Health Trajectory / Quality of Life / Health Outcomes

4. SITUATION/CONTEXT: RESOURCES & OPPORTUNITIES / LIMITATIONS & BARRIERS
1. Individual Factors

- Demographics
  - Older age
  - Less education
  - Lower HHI
  - Unemployed, disabled, or retired
  - No health coverage

- Computer/Internet access and use
  - Do not use Internet
  - Do not own tablet, smartphone, basic cell phone

- Lower health & info. self-efficacy
- Limited health/information/digital literacy
- Less likely to look for health information
- Encountered barriers during health-related information seeking

- Less trust in some sources of health info.
  - Doctors
  - Internet
  - Govt. agencies

- Less social support
- Prefer non-collaborative decision-making
- Feel more fatalistic
2. CHIB Process

- Incognizance
- Info. Need Identif. / Articulation
- Info. Seeking (or avoidance)
- Info. Comp. / Assess. / Mgmt.
- Info. Incorp. / Adapt. / Use (or non-use)
3. Health Outcomes

3. Health Trajectory / Quality of Life / Health Outcomes
4. Situation/Context

• A person’s current situation, along with their broader context.
• The resources and opportunities they have available to them.
• Limitations and barriers that they encounter within their day-to-day lives.
• Both actual and perceived are important.
Future Work

- We are conducting further work to build on this model by incorporating:
  - Selected components of other information behavior models.
  - Findings from additional empirical studies of CHIB.
  - An additional class of influencing variables – characteristics of the information/sources that people consult, but as they interact with characteristics of the individual.
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1. Individual Factors:
- Demographics
- Socioeconomic factors
- Physical factors
- Experiential factors
- Knowledge/Skills
- Beliefs/Perceptions
- Emotions/Attitudes
- Personality/Coping style/Information orientation
- Preferences/Values/Goals/Priorities
- Social factors

2. Information/Source Factors:
- Everyday exposure
- Awareness
- Serendipity
- Perceived accessibility
- Perceived convenience
- Perceived usability/Ease of use
- Prior use/experiences
- Perceived topical & situational relevance
- Perceived cognitive relevance
- Perceived affective relevance
- Perceived accuracy/comprehensiveness
- Perceived credibility/trustworthiness
- Persuasiveness
- Currency
- Novelty
- Perceived Fit/Relatability
- Perceived similarity to self
- Recommended by trusted other(s)?
- Perceived social presence
- Matches pre-existing beliefs?
- Perceived usefulness
- Perceived as actionable, given one’s present situation?

3. CHIB Process:
Incognition >> Information Need Identification / Articulation >> Information Seeking (or avoidance) >> Information Comprehension / Assessment / Management >> Information Incorporation / Adaptation / Use (or non-use)

4. Health Trajectory / Quality of Life / Health Outcomes

5. Situation/Context: Resources & Opportunities / Limitations & Barriers