REACH TO TEACH: PUTTING HEALTH INFORMATION WHERE YOUR PATIENTS GO

CAROLYN CRANE CUTILLI PHD RN
PATIENT AND FAMILY EDUCATION
UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM
Oh yes, please!
OBJECTIVE

Describe strategies and resources to engage patients (R.E.A.C.H. to Teach) across various patient populations.
R.E.A.C.H.

to

Teach

Relate to patient and family
Ask and answer questions
Check understanding
Help promote health literacy
ENGAGING PATIENTS

Personal goals, not clinical goals, fuel patients’ long-term motivation

Education should focus on building the skills necessary to integrate chronic condition management into day-to-day routines.

Let me know if you want to know why I am here.
PERSONAL GOALS

Challenge is how to make behaviors stick. Best way is through understanding and helping patients meet their personal goals.

Strategies

Motivational interviewing

Shared Decision Making

ENGAGING PATIENTS

Education should focus on building the skills necessary to integrate chronic condition management into day-to-day routines.
HEALTH LITERACY BRAIN STORM

Definitions
Factors impacting
TERM COINED

The term “health literacy” was used for the first time in a 1974 paper, *Health Education as Social Policy*, when the author called for minimum health literacy standards for all school grade levels.

(Simonds, 1974)
HEALTHY PEOPLE 2010

“The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”

(Ratzen & Parker, 2000)
EXPANDED HEALTH LITERACY MODEL

Fundamental literacy
(reading, writing, speaking and numeracy)

Science literacy

Civic literacy

Cultural literacy

(Zarcadoolas, Pleasant, & Greer, 2005)
HEALTH LITERACY MODELS

Conceptual models that explain the relationship between health literacy and other factors that have been associated with health literacy.

CAUSAL PATHWAYS BETWEEN LIMITED HEALTH LITERACY AND HEALTH OUTCOMES

Figure 1
Causal Pathways between Limited Health Literacy and Health Outcomes

Occupation, Employment, Income, Social Support, Culture, Language

Access and Utilization of Health Care
- Patient Factors: Navigation skills, Self-efficacy, Perceived barriers
- System Factors: Complexity, Acute care orientation, Tiered delivery model

Provider-Patient Interaction
- Patient Factors: Knowledge, Beliefs, Participation in decision making
- Provider Factors: Communication skills, Teaching ability, Time, Patient-centered care

Self Care
- Patient Factors: Motivation, Problem solving, Self-efficacy, Knowledge/skills
- Extrinsic Factors: Support technologies, Mass media, Health education, Resources

Health Outcomes

Race/Ethnicity, Education, Age

Health Literacy

Vision, Hearing, Verbal Ability, Memory, Reasoning
NATIONAL ASSESSMENT OF ADULT LITERACY (NAAL) 2003

Large-scale national assessment of adult literacy and health literacy focusing on the ability to read, comprehend and apply written information.

89 million Americans have limited health literacy (Represents over 1/3 of the American population)

(Kutner, 2006)
MEDICAL STUDIES INDICATE MOST PEOPLE SUFFER A 68% HEARING LOSS WHEN NAKED.

GETTING THE MOST OUT OF A VISIT TO THE DOCTOR’S OFFICE

Take a friend, someone who will help you remember important information.

Educate yourself. Seek trustworthy information about illnesses or conditions that affect you.

Be up-front. Tell your doctors everything, or they might miss something important.

You have to ask in order to receive. If you want answers, you have to ask questions.

At United Health Foundation, we believe that the more you know, the healthier you will be. Which is why we partnered with the NATIONAL HEALTH COUNCIL to bring you these important health tips. We encourage you to get more involved in your care, to seek out information and to always make sure that the information you use comes from a reliable, evidence-based source. To find out more on this and other important topics, visit UHFtips.org.

United Health Foundation
UNIVERSAL HEALTH LITERACY PRECAUTIONS

- Universal precautions refers to taking specific actions that minimize risk for everyone when it is unclear which patients may be affected.

- Universal Health Literacy Precautions minimize the risk that any one patient will not understand health information.

- Health literacy universal precautions are needed because providers don’t always know which patients have limited health literacy.

(AHRQ, 2007)
Speed Quiz

- From an educational perspective, what are two ways to engage patients?
- What is the benefit of patient goals?
- For patients with chronic health issues, what should education focus on?
- What is the most common definition of health literacy?
- Name two items that impact health literacy according to the expanded health literacy definition?
- Percent of US adults who have low health literacy?
- Why do we have Universal Health Literacy Precautions?
R.E.A.C.H. to Teach

Relate to patient and family
Ask and answer questions
Check understanding
Help promote health literacy
HEALTH INFORMATION SEEKING BEHAVIOR (HISB)

- Most frequent mentioned term/concept in the literature
- Other terms: Consumer-Health Information Seeking Behavior, Personal Health Seeking Behavior
- Shortened “health information seeking” or “information seeking”
- No unified definition – thought to be obvious
- Broadly viewed as the ways individuals obtain information about health, illness, health promotion, and risks to health.

(Lambert & Loiselle, 2007; Baker and Pettigrew, 1999)
CONCEPTS/THEORIES

▪ Granovetter’s “Strength of weak ties” (Baker & Pettigrew, 1999)

▪ “Expanded conceptual model of health information seeking behaviors and the use of information for health care decisions” (Longo, 2005)

▪ “Health Orientation” (Dutta-Bergman, 2004)
GRANOVETTER’S STRENGTH OF WEAK TIES

- Framework out of sociology field

- Social networks composed of strong ties (family, close friends) and weak ties (distant friends, acquaintances)

- Propose weak ties more than strong ties positively impact movement of new resources and knowledge within a personal network

- Those with strong ties have a tendency to know the same information

- Weak ties share info that is not already known because they do not connect regularly and do not have same experiences

- Example: Parents at children’s event share information (Baker & Pettygrew, 1999)
EXPANDED CONCEPTUAL MODEL OF HISB

- “Expanded conceptual model of health information seeking behaviors and the use of information for health care decisions”

- Model based on experiences and reports of patients

- Contextual and personal variables influence information seeking and use

- Contextual variables: health status, healthcare structure, informational environmental factors

- Personal variables: demographic, socioeconomic, culture, education, language, health status

(Longo, 2005)
“HEALTH ORIENTATION”

- Those who seek health information are more “health oriented”
- Stronger interest in health demonstrated through certain health behaviors and attitudes
- Use internet more for health info
- More likely to seek health info from various sources: newspapers, magazines, internet and interpersonal networks
- TV viewed as primary source of health information for those who are less health oriented, however those who gain the most from TV are more health oriented
- Health consciousness positively predicts searching for health information

Predictors: interpersonal communication, community participation, newspaper and magazine readership, and internet usage

(Data-Bergman, 2004; Dutta-Bergman, 2005; Dutta, 2007)
Adults with *Below Basic* health literacy were less likely to obtain health information from written resources. They were more likely to use non-written sources such as radio/TV, health care professional and family/friends/co-workers. Those with *Below Basic* health literacy had a larger percent of those with who did not use non-written sources when compared to those with *Basic* health literacy.

With increasing health literacy, the amount of health information from family/friends/co-workers increased.

80% of adults from this study did not use the internet for health information.

(Kutner, Greenberg, Jin, and Paulson, 2006; White, 2008)
HISB IN PATIENTS WITH CANCER

- Those who do not seek information beyond health care provider: lowest economic and educational groups and scored lowest on behaviors related to health prevention, attention to health in media and trust of mass media health information. (Ramanadhan and Viswanath, 2006)

- Trust in health care providers and information on the Internet is core to motivating others to use the internet. Those who did not trust healthcare provider were less likely to find online info helpful. (Rains, 2007)
HISB IN CANCER PATIENTS

- No difference in internet use between older and younger cancer patients. Older adults use the internet in addition to other sources. Older adults need to be given written information. (Tian and Robinson, 2008)

- Older men’s functional health literacy was developed through their lives and supported by cultural and social resources. (Zanchetta, Perreault, Kaszap, and Viens, 2007)
AA sought less info on prevention and psychosocial support (Thompson, Cvazos-Rehg, Tate, and Gaier, 2008)

Older AA women use health care provider most and will use additional sources but much less (Gollop, 1997; Morey, 2007).

Hispanic individuals seek most health information from interpersonal network. Sources used next varied based on education, income, immigration generation, and literacy. Sources used include ethnically targeted TV and mainstream English TV/newspaper (Hsai, 1987, Cheong, 2007).

Australians from different socioeconomic groups consider the physician the most trusted, important and preferred future source of information (Dart et al., 2008)
"Your green pills are all gone. Do you wanna take a blue and a yellow?"
INTERNET

- Older individuals do not use the internet as much as younger however the gap is closing (Kontos, Blake, Chou, & Prestin, 2014; Levy, Janke, & Langa, 2014; Pew Research Center, n.d.; Tennant et al., 2015)

- An eHealth Literacy Scale has been developed and tested in older adults to determine their ability to use e-health technologies (Chung & Nahm, 2015).

- Despite older individuals using the internet, older individuals prefer a physician-centered model of care (Campbell, 2005; Campbell & Nolfi, 2005)
INTERNET

- Hispanics used the internet less than non-Hispanics and use decreases in middle- and low-income households. Also relationship with physician worsened when internet info brought to appointment (Pena-Purcell, 2008).

- Those with higher chronic illness use internet more often. Those who use internet more often are more likely to change behaviors (Ayers & Kronenfeld, 2007).
INTERNET

- Low-literacy adults used sponsored websites more than a search engine (Birru et al., 2004).

- Chat rooms used by AA showed reading level below eighth grade (Donelle & Hoffman-Goetz, 2008)

- Web users were also more likely to use info when communicating with physicians (Warner and Procaccino 2007).
HISB RESEARCH SUMMARY

- Recent research has focused on the internet as source of health information.
  - Older individuals use the internet less for health information than younger individuals.
  - Caucasians used the internet for health information more than non-Caucasians

- Health care professionals are the most common and trusted source of health information.
HISB RESEARCH SUMMARY

- Individuals use other sources of health information to supplement (Internet, print materials, TV/radio, and family/friends/co-workers).

- How sources are used depend on many factors (age, race, education, health literacy, health status).
Speed Quiz

- What are the common factors that impact health literacy and HISB? What personal factors? What context factors?
- What is the most common and trusted source of health information?
- Who uses the internet?
- What factors determine which sources of health information individuals use?
R.E.A.C.H. to Teach

Relate to patient and family
Educate Simply
Ask and answer questions
Check understanding
Help promote health literacy
RESEARCH QUESTION

What is the association between health literacy and sources of health information used by older adults?
SAMPLE

- Included 2,668 non-incarcerated older adults (age 65 and older) who were part of the 18,000 person household sample from the NAAL study.

- The household sample was determined through a four-stage, stratified area sample.

- Sample was weighted to represent the total United States population.
PARTICIPANTS

The majority of the participants are female, white, married, have some high school or high school graduate, and earn above $40,000 per year. The mean health literacy score for older adults is 214 (Basic) with 59 % of the population having Below Basic or Basic health literacy.
SOURCES OF HEALTH INFORMATION

Health Literacy

- Newspapers
- Magazines
- Internet
- Books
- Radio/TV
- Family/Friends/Co-workers
- Doctor/Health Care Providers

Health Outcomes

- Significant
- Non-significant
## What Sources of Health Information do Older Adults with Below Basic Health Literacy Use?

<table>
<thead>
<tr>
<th>Below Basic (0 - 184)</th>
<th>A lot %</th>
<th>Some %</th>
<th>A little %</th>
<th>None %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>12%</td>
<td>30%</td>
<td>26%</td>
<td>32%</td>
</tr>
<tr>
<td>Magazine</td>
<td>9%</td>
<td>27%</td>
<td>21%</td>
<td>42%</td>
</tr>
<tr>
<td>Books</td>
<td>10%</td>
<td>28%</td>
<td>21%</td>
<td>41%</td>
</tr>
<tr>
<td>Internet</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>93%</td>
</tr>
<tr>
<td>Radio/TV</td>
<td>30%</td>
<td>35%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Family/friends/coworkers</td>
<td>17%</td>
<td>34%</td>
<td>22%</td>
<td>27%</td>
</tr>
<tr>
<td>Doctor/Health Care Providers</td>
<td>41%</td>
<td>29%</td>
<td>18%</td>
<td>12%</td>
</tr>
</tbody>
</table>
**WHAT SOURCE OF HEALTH INFORMATION DO OLDER ADULTS WITH BASIC HEALTH LITERACY USE?**

<table>
<thead>
<tr>
<th>Basic (185 to 225)</th>
<th>A Lot (%)</th>
<th>Some (%)</th>
<th>A Little (%)</th>
<th>None (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>22%</td>
<td>39%</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>Magazine</td>
<td>9%</td>
<td>30%</td>
<td>21%</td>
<td>42%</td>
</tr>
<tr>
<td>Books</td>
<td>17%</td>
<td>45%</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Internet</td>
<td>5%</td>
<td>8%</td>
<td>6%</td>
<td>81%</td>
</tr>
<tr>
<td>Radio/TV</td>
<td>27%</td>
<td>46%</td>
<td>20%</td>
<td>7%</td>
</tr>
<tr>
<td>Family/friends/coworkers</td>
<td>14%</td>
<td>39%</td>
<td>26%</td>
<td>21%</td>
</tr>
<tr>
<td>Doctor/Health Care Providers</td>
<td>43%</td>
<td>38%</td>
<td>14%</td>
<td>5%</td>
</tr>
</tbody>
</table>
WHAT SOURCE OF HEALTH INFORMATION DO OLDER ADULTS WITH *INTERMEDIATE* HEALTH LITERACY USE?

<table>
<thead>
<tr>
<th>Intermediate (226 to 309)</th>
<th>A Lot %</th>
<th>Some %</th>
<th>A little %</th>
<th>None %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>26%</td>
<td>43%</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>Magazine</td>
<td>21%</td>
<td>50%</td>
<td>20%</td>
<td>9%</td>
</tr>
<tr>
<td>Books</td>
<td>20%</td>
<td>48%</td>
<td>23%</td>
<td>9%</td>
</tr>
<tr>
<td>Internet</td>
<td>8%</td>
<td>17%</td>
<td>10%</td>
<td>65%</td>
</tr>
<tr>
<td>Radio/TV</td>
<td>21%</td>
<td>47%</td>
<td>25%</td>
<td>7%</td>
</tr>
<tr>
<td>Family/friends/coworkers</td>
<td>15%</td>
<td>41%</td>
<td>30%</td>
<td>14%</td>
</tr>
<tr>
<td>Doctor/Health Care Providers</td>
<td>43%</td>
<td>38%</td>
<td>15%</td>
<td>4%</td>
</tr>
</tbody>
</table>
**WHAT SOURCE OF HEALTH INFORMATION DO OLDER ADULTS WITH PROFICIENT HEALTH LITERACY USE?**

<table>
<thead>
<tr>
<th>Source</th>
<th>A lot %</th>
<th>Some %</th>
<th>A little %</th>
<th>None %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>23%</td>
<td>43%</td>
<td>23%</td>
<td>11%</td>
</tr>
<tr>
<td>Magazine</td>
<td>7%</td>
<td>59%</td>
<td>29%</td>
<td>5%</td>
</tr>
<tr>
<td>Books</td>
<td>27%</td>
<td>34%</td>
<td>34%</td>
<td>5%</td>
</tr>
<tr>
<td>Internet</td>
<td>4%</td>
<td>26%</td>
<td>29%</td>
<td>41%</td>
</tr>
<tr>
<td>Radio/TV</td>
<td>14%</td>
<td>33%</td>
<td>46%</td>
<td>7%</td>
</tr>
<tr>
<td>Family/friends/coworkers</td>
<td>18%</td>
<td>42%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Doctor/Health Care Providers</td>
<td>47%</td>
<td>22%</td>
<td>29%</td>
<td>2%</td>
</tr>
</tbody>
</table>
RESEARCH SUMMARY

- There is a significant relationship between health literacy and sources of health information except use of family/friends/co-workers.
- Use of each source generally increases with increasing health literacy level.
- As health literacy decreases the use of each source of health information decreases. Those with the lowest health literacy use each source the least.
- Implications: Those with the lowest health literacy are not seeking each source of health information as much as those with higher health literacy. Thus, as health care providers we need to reach out to those with the lowest health literacy to assure that they have information.
R.E.A.C.H. to Teach

Relate to patient and family
Ask and answer questions
Check understanding
Help promote health literacy
Scripps Health in San Diego, California, partners with local federally qualified health centers to offer a scaled patient engagement approach, which it calls Project Dulce.

The program is dedicated to “Diabetes Excellence Across Communities,” with a mission of improving the lives of people with diabetes through culturally appropriate, community-based diabetes management, education and support programs.

One of the reasons Project Dulce is so successful is that it is taught by patients.

REFERENCES


Advisory Board, 11 Insights on Engaging Patients in Ongoing Management, 2014)


REFERENCES


REFERENCES


Project Dulce, [https://www.scripps.org/services/metabolic-conditions__diabetes/why-choose-scripps__project-dulce](https://www.scripps.org/services/metabolic-conditions__diabetes/why-choose-scripps__project-dulce)
REFERENCES


