Health Literacy: The 800 Pound Gorilla in Health Care

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The single biggest problem in communication is the illusion that it has taken place.

-- George Bernard Shaw

• Over three quarters of physicians (77%) believed patients knew their diagnosis; however, when asked, only slightly over half (57%) of patients actually did ($P<0.001$).

• Nearly all physicians (98%) stated that they at least sometimes discussed their patients’ fears and anxieties, compared with 54% of patients who said their physicians never did this ($P=0.01$).
Common Definition

Health literacy is the degree to which people have the capacity to:

- Obtain, process, and understand basic health information and services
- Make appropriate healthcare decisions (act on information)
- Access/ navigate healthcare system

Derived from the definition of health literacy in the Institute of Medicine, A Prescription to End Confusion.
WI high school graduation rate is 89.6%.

U.S. rate is 83%.
Health literacy of U.S. Adults

(NCES, 2005)

- Below Basic: 12%
- Basic: 14%
- Intermediate: 22%
- Proficient: 52%

88% of U.S. Adults below Proficient level
That is nearly 9 out of every 10 adults!

PLUS: 3% could NOT be tested
Health literacy of U.S. Adults

- **Proficient**: Define medical term from complex document, calculate share of employee's health insurance costs (12%)
- **Intermediate**: Determine healthy weight from BMI chart, interpret prescription and over-the-counter drug labels (53%)
- **Basic**: Understand simple patient education handout (22%)
- **Below Basic**: Circle date on appointment slip, understand simple pamphlet about pre-test instructions (14%)

Kutner et al. 2006
Health Literacy Challenges
Many Overestimate their Knowledge of Health Insurance

Three out of four people felt confident they know how to use health insurance. However, only one out of five people could accurately calculate their out-of-pocket costs.

Source: AIR Health Insurance Literacy Survey, 2013

American Institutes for Research | www.air.org
Most patients don’t know how to engage in their health
“Health Care is Too Hard to Use and It’s Not Your Fault”

http://www.coloradohealth.org/yellow.aspx?id=6604
Health Literacy

Patient/Caregiver Skills + Complex System Demands
The Curse of Knowledge

A BIRD IN THE HAND
Intentional Blindness
Poor Communication

- 90% complaints
- 75% malpractice cases (Beckman HB, et al. 1994)
- 65% doctors underestimate the information needs of patients (Waitzkin H, 1984)
- 30-35% noncompliance due to poor communication
Paper Cup
Paper Cup Instructions

1. Fold the square in half along a diagonal to form a triangle. Hold the paper with the tip of the triangle facing up.
2. Fold the left point of the triangle to the middle of the opposite side.
3. Fold the right point of the triangle to the middle of the opposite side.
4. Fold down a single layer from the top.
5. Fold back the other single layer from the top.
Paper Cup Instructions

1. 
2. 
3. 

4. 
5. 
6. 

7.
Small Group Debrief

• What did you notice about yourself?
• How did you feel as you made the cup?
• How does this relate to how we provide instructions to patients?
The Patient Experience
Dosing Instructions?

• Numerous ways to get it wrong
• Abbreviation not in dosage instructions
• Use of uncommon measures (drams, cc)
• Dssp?
Health Literacy Is Dynamic

- Health literacy demands can change over time and differ by setting and circumstance
  - Age (teen vs senior citizens)
  - Life event (birth of a child, stress at home)
  - Medical condition (new diagnosis, chronic illness)
- Health literacy is highly contextual and reflects both sides of the interaction.
A communication strategy which assumes that all health care encounters are at risk for communication errors, and aims to minimize risk for everyone.

(DeWalt et al, 2010)
Avoid Miscommunications
Health literacy is a stronger predictor of health status than age, income, employment status, education level, or racial and ethnic group

Health Literacy Costs

• Those with low health literacy have over four times higher average annual health care costs – $13,000 compared to only $3,000 for those with higher literacy levels (AMA Foundation “Health Literacy A Manual for Clinicians”)

• Nationally is estimated to cost $238 billion annually - just over 10% of total US health care expenditures.
$3.4 billion to $7.6 billion annually for Wisconsin (Vernon, et al. Low health literacy: implications for national health policy, 2007)
An Example: Medication Errors

“How would you take this medicine?”

395 primary care patients in 3 states

- 46% did not understand instructions ≥ 1 labels
- 38% with adequate literacy missed at least 1 label

“Show Me How Many Pills You Would Take in 1 Day”

Take two tablets by mouth twice daily.

Humibid LA 600MG 1 refill
In a study of adults with literacy below the 6th grade level:

71% correctly read the instruction to “take two tablets by mouth twice daily”

Only 35% could demonstrate the number of pills to actually take

(Davis et al, 2006)
Rates of Correct Understanding vs. Demonstration
“Take Two Tablets by Mouth Twice Daily”

Davis TC, et al.
Annals Int Med 2006
Brown Bag Medication Review
Move toward standardization:
How many ways can you say it?

39 ways to say “1 tablet a day”

Percent Distribution of Hand-Written Sig Messages in a Public Hospital

Percent Distribution of Electronically-Generated Sig Messages in an Academic Practice

Bailey et al., under review, Arch Intern Med, 2008
Proven Clear Communication Techniques

1. Use plain language and analogies

2. Focus on the 2 or 3 most important “need to know” and start with these

3. Check for understanding using a “teach back” method
A Quick Note on Jargon
Provide Explanations in Common Language

• Most patients do not take anatomy in school
• We use words differently in health
• Use familiar, common, & everyday language. If possible, use the patient’s own words
• Use analogies that are relatable to the patient
Visuals improve Understanding and Recall

✓ Pictures/demonstrations most helpful to patient with low literacy & visual learners
✓ Most health drawings too complicated
✓ Physician drawings often very good (not too complex)
✓ Patients say “show me” & “I can do it”
Patient Recall of Health Information Is Poor

• Patients/Parents forget 40%–80% of what their doctor tells them as soon as they leave the office and nearly 50% of what they do remember is recalled incorrectly.

• The more information provided, the less a patient/parent is able to recall.

Chunk Information
AND
Check for Understanding

• Break down information into 2 or 3 concepts at a time
  – Could supplement with videos
• Review with patient or family member.
• Conduct a teach back to check understanding.
Teach-back Is Supported by Research

- “Asking that patients recall and restate what they have been told” is one of 11 top patient safety practices based on the strength of scientific evidence.”
  
  AHRQ, 2011 Report, *Making Health Care Safer*

- “Physicians’ application of interactive communication to assess recall or comprehension was associated with better glycemic control for diabetic patients.”
  
  Schillinger, Arch Intern Med/Vol 163, Jan 13, 2003, “Closing the Loop”
Teach-back – Additional Points

Do not ask yes/no questions like:
  o “Do you have any questions?”
  o “Do you understand?”

INSTEAD…

“What questions do you have?”

“Tell me one or two questions you've been thinking about.”
HEALTH LITERACY CHECKLIST

✓ Use Everyday Language
✓ Actively Encourage Patient Questions
✓ Provide Complex Information in Chunks
✓ Ensure Understanding through Teach Back
Questions?

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