Practical Strategies To Improve Health Communication

Terry Davis, PhD
Professor of Medicine and Pediatrics
LSUHSC - Shreveport
Director, Health Literacy Core

2009
What You Will Be Able To Do (Objectives)

- Describe barriers to patient understanding and adherence to physician instructions
- Identify strategies to improve patient understanding of Rx drug labels
- List practical strategies to improve communication/education with your patients
- List 3 things patients need to know after diagnosis
- List components of user-friendly patient education
What Do Your Patients Need To Know and Do?

• 21st century health care will focus more on patient behavior – not just diagnosis and treatment

• Behavior – most prominent contributor to chronic disease, ID, mortality, cost

• Physicians lack adequate training in educating patients effectively and helping them change their health behavior
What’s The Problem?

Patients’ Education, Literacy, Language
Unnecessarily Complex Health Information
LA high school drop out rate is 47%

Problems Are Not Going Away
Low Literacy Rates By Parish

% Adults with Level 1 Literacy Skills

- > 30%
- 20% to 30%
- 15% to 20%
- < 15%

U.S. Department of Education
“Public health emphasis is on getting information ‘out’ to people not whether it has been understood and used.”

“Health care professionals do not recognize that patients do not understand the health information we are trying to communicate.”

Dr. Richard Carmona, U.S. Surgeon General

Mentioned health literacy in 200 of last 260 speeches
Health Education Needs To Be Improved

- 90 million adults have trouble understanding and acting on health information
- Health information is unnecessarily complex

Patient Education is often NOT:

- Easy to read, understand, act on
- Organized from patients’ perspective
- Focused on behavior as well as knowledge
What is it Like?

- These instructions simulate what a reader with low literacy sees on the printed page
- Read instructions out loud.
- You have 1 minute to read.
- Hint: The words are written backwards and the first word is “cleaning”
GNINAELC – Ot erussa hghc ecnamrofrep, yllacidoirep naelc eht epat sdaeh dna natspac revenehw uoy eciton na noitalumucca fo tsud dna nworm-der edixo selcitrap. Esu a nottoc baws denetsiom htiw lyporposi lohocla. Eb erus on lohocla sehcuot eht rebbur strap, sa ti sdnet ot yrd dna yllautneve kcarc eht rebbur. Esu a pmad tholc ro egnops ot naelc eht tenibac. A dlim paos, ekil gnihsawhsid tnegreted, lliw pleh evomer esaerg ro lio.
Low Literate Diabetic Patients Less Likely to Know Correct Management*

*Williams et al., Archive of Internal Medicine, 1998

Need to Know: symptoms of low blood sugar

Need to Do: correct action for symptoms of low blood sugar
Video

It’s hard to be a patient

Health Literacy:
An individual's ability to obtain, process and understand health information and services and make appropriate health care decisions and access and navigate the health care system.
1st Health Literacy Assessment

n=19,000 U.S. Adults

Intermediate: 53%
Basic: 22%
Below Basic: 13%
Proficient: 12%

Hispanic: 22%
Medicare: Average

Health Literacy Tasks

• **Below Basic:** Circle date on doctor’s appointment slip

• **Basic:** Give 2 reasons a person with no symptoms should get tested for cancer based on a clearly written pamphlet

• **Intermediate:** Determine what time to take Rx medicine based on label

• **Proficient:** Calculate employee share of health insurance costs using table

*67% probability individual can perform task*
Medication Error Most Common Medical Mistake

Patient error (>500,000 adverse events, $1 Billion)

- 3 billion Rx written/year
- Elderly fill 27 Rx/year, see 8 physicians
- 1 in 6 Peds Rx dosed incorrectly
- Most labels and inserts are in English only

IOM 2006 Report: Poor patient comprehension and subsequent unintentional misuse is a root cause of medication error and worse health outcomes
Patients with low literacy struggling to read and interpret Rx drug labels.
Do Patients Understand How To Safely Take Their Medication?
What Does this Picture Mean?

- “Someone swallowed a nickel”
- “Indigestion”
- “Bladder”
- “Looks like a ghost- Casper”
Does Adding the Words Help?

- “Chew pill and crush before swallowing”
- “Chew it up so it will dissolve, don’t swallow whole or you might choke”
- “Just for your stomach”

46% of patients with low literacy understood these instructions
What Does This Picture Mean?

- “Somebody is dizzy”
- “Don’t touch this stuff”
- “Take anywhere”
- “Chills or shaking”
- “Having an experience with God”
1 in 10 Adults Struggle With Decoding

- “Use extreme caution in how you take it”
- “Medicine will make you feel dizzy”
- “Take only if you need it”

8% of patients with low literacy understood this instruction
What about Math Skills to Give Amoxyl?

Give 4 ccs 3 times daily for 10 days
- 7:00 A, 7:15 A, 7:30 A- before work?
  (shared context)
- Divide 3 into 24 or 12?

Understand measurement
  (cc, ml, tsp, tbsp)

Shared Meaning
  (3X day, Where you put amoxyl)

Tsp. volume ranges from 2-9 mL
Video

It's easy to make a mistake
“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”

John Smith        Dr. Red
Take two tablets by mouth twice daily.
Humibid LA 600MG 1 refill

![Bar chart showing correct understanding and demonstration for patients with low literacy.]

Correct (%)

Patients With Low Literacy

Understanding
Demonstration

71
35
<table>
<thead>
<tr>
<th>What Predicts Misunderstanding?</th>
<th>AOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Literacy Level</strong></td>
<td></td>
</tr>
<tr>
<td>Low (≤ 6th gd)</td>
<td>2.8</td>
</tr>
<tr>
<td><strong># of Medications Taken</strong></td>
<td></td>
</tr>
<tr>
<td>1-2 meds</td>
<td>2.7</td>
</tr>
<tr>
<td>3- 4 meds</td>
<td>3.6</td>
</tr>
<tr>
<td>&gt; 5 or more</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Does Wording Impact Comprehension
“How Would You Take This Medicine?”

399 medicine clinic pts LSUHSC-S, Northwestern, Einstein
46% <9th gd. reading, averaged 2.8 meds

78% misinterpreted ≥ 1 labels
37% misinterpreted ≥ 3 labels
More Precise Labels Aid Comprehension

*Instructions that require interpretation are poorly understood*

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dosage</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metformin, 1000 mg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take 1 pill by mouth every 12 hours.</td>
<td>61</td>
<td>30*</td>
<td></td>
</tr>
<tr>
<td>Take one tablet by mouth twice daily.</td>
<td>90</td>
<td>70.*</td>
<td></td>
</tr>
<tr>
<td>Take 2 pills by mouth every day. Take 1 with breakfast and 1 with supper.</td>
<td>88</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Glyburide, 5 mg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take two tablets by mouth twice daily.</td>
<td>71</td>
<td>33*</td>
<td></td>
</tr>
<tr>
<td>Take 2 pills in the morning and 2 pills in the evening.</td>
<td>92</td>
<td>76‡</td>
<td></td>
</tr>
<tr>
<td>Take 2 pills by mouth at 8 am and 2 pills at 6 pm.</td>
<td>90</td>
<td>76</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.001, ‡ p<0.01
Randomized Control Trial Will Assess Actual Use Of Patient Friendly Label

- Larger font
- Indication for use
- Concrete precise dose, visual aid
- Warning panel 3
- Pharmacy info panel 2

Goal: Develop integrated system of Rx medication instruction. Make a case for standardizing it.
How Will You Write Rx Instructions?

Rx label can only include what you write

– Will you include what its for?
– When patient needs to take it?
– Duration?
– With food?
– What questions do you think patients will have?

Approximately half of MD’s do not mention dose, timing, duration or possible side effects of medication.
7 Strategies to Improve Oral Communication

1. Slow down
2. Use plain language
3. Limit information (3-5 key points) repeat
4. Be specific and concrete, not general
5. Demonstrate, draw pictures
6. Teach Back (Confirm Understanding)
7. Be positive, hopeful, empowering
Tell Me 3

Strategy for Limiting Information

• 3 simple points:
  – What is my problem? (Diagnosis)
  – What do I need to do? (Treatment)
  – Why is it important that I do this? (Benefit)
Pictures, Models, Demonstrations Help Convey Message

Serving of fish – size of palm

Steak – size of deck of cards

Serving of rice – teacup

Fruit – size of tennis ball
Confirm Patient Understanding
‘Teach back’ Improves Outcomes

Audio taped visits – 74 DM patients, 38 physicians

✓ Patients recalled < 50% of new concepts
✓ Physicians assessed recall 13% of time
✓ When physicians used “teach back” the patient was 9X more likely to have HbA1c levels below the mean
✓ Visits that assessed recall were not longer

Schilinger, D. Arch Int Med, 2003
Practice Recommendations

- Focus on patients’ ‘need to know and do’ vs. ‘nice to know’
- Use teaching tools (pt ed handouts, “brown bag” meds)
- Write brief “take home” information (problem, tx, benefit)
- Write precise Rx instructions state purpose
- Review ‘operating instructions’ for medicines
- ‘Teach back’ to confirm understanding
Terry C. Davis, PhD
Professor, Departments of Medicine and Pediatrics
Louisiana State University Health Sciences Center
1501 Kings Highway
Shreveport, LA 71130
Phone: 318-675-5813
Fax: 318-675-4319
E-mail: tdavis1@lsuhsc.edu