Health Literacy: Can Nursing as a Profession Do More to Reduce this Disparity?

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Objectives

• Provide background information on national initiatives to improve health literacy;
• Enhance the knowledge of attendees to identify populations at risk for low health literacy;
• Identify examples of assessments used in clinical and research settings as well as anecdotal approaches to determine patients at risk;
• Review policy implications;
• Provide examples of resources for referral of at risk populations; and
• Offer guidelines for nursing curriculum development for this topic.
Background

S. K. Simonds coined the term “health literacy,” (HL) which first appeared in the *Health Education Monographs* published in 1974. Since that time, professional organizations and public health agencies have explored health literacy as it relates to educational and health outcomes.

There are numerous HL definitions from multiple agencies including HHS, IOM, AMA, WHO, *Healthy People 2010*; and the ACA law- but nursing as a profession has not formally defined HL or initiated policy change for significant impact. The medical community is much more engaged with research and clinical efforts as evidenced by the health literacy initiatives put forth by AMA and research studies by medicine. 17 groups/researchers defined.

Nursing is the nation's largest health care profession, with more than 3.1 million registered nurses nationwide (HRSA, 2010). In the past several years, nurses are becoming more active in research and via Scholarly Practice initiatives from DNP students but we still lag far behind medicine for research and initiatives.

Research has found that health care providers often lack adequate knowledge about HL and the skills needed to address low HL among patients and caregivers (Coleman et al., 2013; Nutbeam, 2008; Rogers, Wallace, & Weiss, 2006; Bass, Wilson, Griffith, & Barnett, 2002) and many are not aware of populations at risk or the significance of the problem (Jukkala, Deupree, Morrison 2009).
Scope of the Problem

• Approximately ½ of the adult population in America is classified as having difficulty with reading or computing math problems
  (NAL 1993, NAAL 2003; and 2013 Program for the International Assessment of Adult Competencies (PICCA))

• In 2008, limited health literacy was estimated to add between $106 \text{ billion} \text{ to } $238 \text{ billion} of unnecessary costs per year to an already overburdened health care system
  (Vernon, Trujillo, Rosenbaum, & DeBuono, 2007)
National Literacy Act of 1991

**Definition:**
“an individual’s ability to read, write, and speak in English and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one’s goals, and develop one’s knowledge and potential”

(US Congress, 1991 National Literacy Act)

Nurses are at the forefront of patient care with the potential to make the most significant contribution to improve health care for low literate patients......but is nursing prepared to deal with a low literate population?
"As a former nurse, trauma surgeon, and public health director, I realize there is a wall between us and the people we were trying to serve. Healthcare professionals do not recognize that patients do not understand the health information we are trying to communicate. We must close the gap between what healthcare professionals know and what the rest of America understands. “ Dr. Carmona
Institute of Medicine Roundtable on Health Literacy Report

Vision of a Health Literate America, 2004

- Everyone should have the opportunity to use reliable, understandable information to make health choices;
- Health content should be basic curriculum for K-12; (not just in Jr. High)
- Need accountability of all health literacy policies and practices;
- Public health alerts should be presented in plain language;
- Cultural factors integrated in all aspects of patient materials;
- Health care practitioners should communicate with each other using every-day language;
- Provide ample time for discussions between patients and health care providers;
- Patients should feel comfortable to ask questions as part of healing process;
- Rights and responsibilities for health care instructions-plain language;
- Informed consent docs developed so all understand if they want to give or withhold consent based on information they need to fully understand.
National Action Plan to Improve Health Literacy

US Department of Health and Human Services (2010)

The Vision Statement:

- Provide everyone with access to accurate and actionable health information
- Deliver person-centered health information and services
- Support lifelong learning and skills to promote good health
Often Misunderstood

Cultural initiatives *are not* the same as health literacy initiatives.....

A significant component of health literacy *does relate* to providing culturally appropriate messages however that is but one of the areas of expertise related to health literacy to improve the health of populations; nurses should be able to identify at-risk patients and understand how to refer them for resources and resources need to be developed.

Assessment Tools-National

Two National Studies
10 years Apart 1992 and 2003
National Assessment of Literacy Study (NALS) 1992
And
National Assessment of Adult Literacy (NAALs) 2003
These gave us a “snapshot” of levels of low HL in U.S.

And International  (PICCA) 2013
US adults scored below the international average in all domains
More than 90 million people have low health literacy.

- A majority of adults had Intermediate health literacy.
- Over 75 million adults combined had Basic and Below Basic health literacy.
THE NUMBERS....

• A person at the “below basic” literacy level would only have a 67% probability of being able to read a medical appointment date on a hospital appointment form.

• Additionally, a person at the “intermediate” literacy level would only have a 67% probability of understanding what time to take their medications from reading a prescription label...

• Specifically, people with low health literacy are twice as likely as others to be hospitalized, more likely to have chronic health issues and less likely to seek treatment.

Michael Villaire of the Institute for Healthcare Advancement

(Resource: NAL, 1992; NAALs 2003)
Patients with LHL nearly twice as likely to be hospitalized

Baker, Parker, Williams, et al. JGIM 1999
Disparities/At-Risk Populations Associated with Low Health Literacy

➤ The largest segment of the U.S. population affected by low HL are native born speakers of English, *65 years and older*

(National Center for Education Statistics 2003; 1993)

➤ Those disproportionally affected by low HL are individuals who are poor; members of cultural and ethnic minorities; Recent refugees and immigrants; live in the southern and western region of the US; those with less than a HS degree or GED; those who are over the age of 65; and Non-native speakers of English (IOM, 2004; NCES 2003; 1993)

➤ Patients with low HL present at later stages of illness-waiting until signs and symptoms are advanced and the problem is severe and usually end up presenting at the ER (Koh, et al., 2012)
Patients often have trouble understanding discharge instructions.

Patients’ understanding of instructions at hospital discharge - A Mayo Clinic study, showed the following:

- 27.9% could name medications
- 37.2% knew purpose of medications
- 14% knew side effects
- 41.9% knew their diagnosis

(Koh, et al., 2012)

Do patients understand and do the nurses who care for them understand?

https://www.youtube.com/watch?v=7X4CoXldlCA
https://www.youtube.com/watch?v=2N0gCzdVFnM
https://vimeo.com/50438603
Patient Education Issues

Why are low HL patients more likely to be hospitalized?

Patients don’t understand treatment regimens &/or the importance of following them, and teaching them can be very time consuming....

- they make medication errors
- Patients with asthma are less likely to know how to use an inhaler
- Patients with diabetes are less likely to know symptoms of hypoglycemia
- Patients with hypertension are less likely to know that weight loss and exercise lower blood pressure
- For chronic patients, some health care providers assume they must already know ever thing they need to know

(Koh, et al., 2012)
Is NURSING part of the problem or part of the solution? BOTH

Schwartzberg and colleagues (2007) surveyed physicians, pharmacists, and nurses to identify communication techniques currently in use and their perceived effectiveness with patients. They found that a wide variety of techniques were used and that the extent of use often varied significantly by discipline. For example, nearly all professionals (92–98%) reported the routine use of plain language; however, nurses were nearly twice as likely to use teach-back (60.5%) in comparison with physicians (35.4%) and pharmacists (27.7%). Physicians were more likely to chunk information down into two or three concepts and check for understanding (55.1%) in comparison with nurses (42.5%) and pharmacists (36.4%). Also, pharmacists were more likely to read written information aloud to patients (70%) versus nurses (57.6%) and physicians (46.9%).

Assessment Tools-Individual

- Test of Functional Health Literacy in Adults-used in research
- Test of Functional Health Literacy for Adults in Dentistry (TOFHLAiD)
- REALM
- WRAT
- Short Assessment of Health Literacy–Spanish and English (SAHL-S&E)
- Short Assessment of Health Literacy for Spanish Adults (SAHLSA-50)
- Others online

(Health literacy measurement tools; AHRQ, 2014)

- Newest Vital Sign- popular for in clinic setting* (Weiss, et al., 2005)

For more details and actual examples of tests click on:
Assessment Tools-Individual

• **Anecdotal**- hand your patient a prescription bottle (empty) for simple medication like Amoxicillin with normal directions on the bottle; can they tell you what it is, what is it for, how many to take and when during the day?

• When you offer patient education material; come back for questions, if they say no questions consider.....*can they read?*

  TEACH BACK-make them explain verbatim!
Red Flags for Low Literacy

- Missed appointments (high frequency)
- Incomplete registration forms
- Non-compliance with medication
- Unable to name medications, explain purpose or dosing
- Identifies pills by looking at them, not reading label
- Unable to give coherent, sequential history
- Ask fewer questions
- Lack of follow-through on tests or referrals
And the Process is Becoming More Complex

Health Literacy and Patient Safety: AMA Foundation, 2007
7 Tips for Clinicians

- Use plain language
- Limit information (3-5 key points)
- Be specific and concrete, not general
- Demonstrate, draw pictures, use models
- Repeat/summarize
- Teach-Back (confirm understanding)
- Be positive, hopeful, empowering
What are we missing? Are we preparing our students to identify low health literacy and to provide effective patient education?
1. Identify patients with low health literacy;
2. Correctly communicate with patients/families to make sure they understand;
3. Determine the grade level at which patient education materials are written;
4. Create appropriate patient education materials written at a level so all patients can understand them.

Are all nurses you know able to:
Multilayered Problem

- New nursing grads
- Nurses who have worked for decades
- Hospital-all levels of nursing
- Primary care clinics
- Acute care clinics
- Nurse practitioners
Will Require Multiple Solutions

- BSN, AND, and LPN education
- New employee modules at all levels
- CE for experienced nurses
- State Boards of Nursing-consider CE modules
- Enforcement of Joint Committee requirements
- Insurers must get involved
- MSN education-Nurse practitioners
- Large business must get involved
- Policy changes wherever needed
- Nurses claim their place at the table (research, leadership in government agencies and on boards)
- Media efforts; Public Service Announcement
AACN’s Baccalaureate Essentials-2008

• Essential VII: Clinical Prevention and Population Health- mentions health literacy as a possible topic of sample content (p.25)

• Essential IX: Baccalaureate Generalist Nursing Practice (p.31)
The baccalaureate program prepares the graduate to:
  – Provide appropriate patient teaching that reflects developmental stage, age, culture, spirituality, patient preferences, and health literacy considerations to foster patient engagement in their care.

Referenced in definitions section (p.37)
• Health Literacy: The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (U.S. Department of Health and Human Services, 2000b)
“Health information is growing exponentially. Health literacy is a powerful tool in health promotion, disease prevention, management of chronic illnesses, and quality of life—all of which are hallmarks of excellence in nursing practice. Master’s-prepared nurses serve as information managers, patient advocates, and educators by assisting others (including patients, students, caregivers and healthcare professionals) in accessing, understanding, evaluating, and applying health-related information. The master’s-prepared nurse designs and implements education programs for cohorts of patients or other healthcare providers using information and communication technologies” (p. 19).
AACN’s Master’s Essentials (cont.)

Essential VIII: Clinical Prevention and Population Health for Improving Health (p.24)
The master’s-degree program prepares the graduate to: (Mentions culturally relevant numerous times) (p.25)

Mentioned as sample content: Theories and applications of health literacy and health communication (p. 26).

Essential IX: Master’s-Level Nursing Practice
The master’s-degree program prepares the graduate to:
Use information and communication technologies to advance patient education, enhance accessibility of care, analyze practice patterns, and improve health care outcomes, including nurse sensitive outcomes. (p.27)

Specific
12. Apply learning, and teaching principles to the design, implementation, and evaluation of health education programs for individuals or groups in a variety of settings. (p. 28).
13. Establish therapeutic relationships to negotiate patient-centered, culturally appropriate, evidence-based goals and modalities of care. (p. 28).

Also...
Mentioned in sample content
Referenced in definitions section
The Essentials of Master's Education for Advanced Practice Nursing (1996)

- Mentions communication
- Primarily relates to interprofessional collaboration and communication.
Individuals entering an advanced practice nursing program are expected to possess effective communication and patient teaching skills. Although these are basic to all professional nursing practice, preparation in the advanced practice nursing role must include continued refinement and strengthening of increasingly sophisticated communication and observational skills. Health/physical assessment content must rely heavily on the development of sensitive and skilled interviewing.

Course work should provide graduates with the knowledge and skills to: (p. 23)

8. develop an effective and appropriate plan of care for the patient that takes into consideration life circumstance and cultural, ethnic, and developmental variations.
The Good News-but is it enough?

AACN 2013 Recommendation

- Study by Coleman, Hudson and Maine, 2013-Consensus Study for competencies of Health Professionals. AACN and NLN at the table. 16 organizations/23 participants/ 2 were nurses.
- September 2013 AACN (See page 25 and 26 of the report) released a supplement to the essentials for baccalaureate education of professional nursing practice. The title of the report is: Public Health: Recommended Baccalaureate Competencies and Curricular Guidelines for Public Health Nursing

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<tr>
<th>Essential IX: Baccalaureate Generalist Nursing Practice</th>
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<tr>
<td>In addition to the generic competency statements listed in the Essentials document, it is recommended that the baccalaureate nursing program prepare the graduate to:</td>
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<td>• Assess the health literacy of individuals, families, and groups served.</td>
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<tr>
<td>• Utilize an ecological perspective in health assessment, planning, and interventions with individuals, families, and groups.</td>
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<tr>
<td>• Use basic descriptive epidemiological methods when conducting a health assessment for individuals, families, and groups.</td>
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**Teaching Strategies:**

- Present simulations and case studies focused on health literacy challenges in public health nursing. Focus on populations known to have low health literacy such as the geriatric population, immigrant populations, and vulnerable groups.
WHERE DO WE GO FROM HERE?
Elements for consideration in developing a HL Curriculum

1. Examine definitions and implications of literacy and functional literacy measures.
2. Identify testing resources available for the measurement of health literacy.
3. Utilize tools to identify the level of health literacy of one or more individuals.
4. Identify communities at risk for increased health care cost due to low health literacy.
5. Discuss political and economical reasons for improved health literacy.

Modeled from:

Elements to Include in HL Curriculum (cont.)

6. Discuss common problems/solutions for health care professionals and their clients/patients.

7. Discuss national statistics on literacy.

8. Perform an analysis on selected health care information provided by the instructor to determine the reading level of the material.

9. Incorporate knowledge of the latest research findings of health literacy into each student’s selected educational track.

Modeled from:

1. IOM Book Health Literacy: A Prescription to End confusion, 2004;
Beyond the Cycle of Costly ‘Crisis Care’

• Despite its importance, health literacy has until recently been relegated to the sidelines of health care improvement efforts aimed at increasing access, improving quality, and better managing costs.

• Recent federal policy initiatives ... have brought health literacy to a tipping point

• If public and private organizations make it a priority to become health literate, the nation’s health literacy can be advanced to the point at which it will play a major role in improving health care and health for all Americans.

Koh, HK, Berwick DM, Clancy, CM, Baur, C, Brach, C, Harris, LM, Zerhusen EG.

New Federal Policy Initiatives to Boost Health Literacy can Help the Nation Move Beyond the Cycle of Costly ‘Crisis Care.’

Health Affairs, Available at

http://content.healthaffairs.org/content/early/2012/01/18/hlthaff.2011.1169.full.html
Post Assessment of the Affordable Health Care Act

As we begin to build a culture of health utilizing best practices for health literacy, we should consider the many recommendations made by academia, industry, government, foundations and associations, and representatives of patient and consumer interest groups to address this serious and costly issue.

(IOM Roundtable for Health Literacy: Health Literacy: Past, Present and Future, November 6, 2014)

http://www.iom.edu/Activities/PublicHealth/HealthLiteracy/2014-NOV-06.aspx

We can no longer continue to blame the patient....
Nursing Education

Entry level nursing curriculum and beyond - How does nursing fit into this disparity—can we do more through improved initiatives for nursing education?

Section of the ACA law states:

| Sec. 5301 | Training in Family Medicine, General Internal Medicine, General Pediatrics, and Physician Assistantship | Amends Title VII of the Public Health Service Act to permit the Secretary to make training grants in the primary care medical specialties. Preference for awards are for qualified applicants that “provide training in enhanced communication with patients... and in cultural competence and health literacy.” |
Policy Implications-Nursing (cont.)

*Joint Commission*-are reviewers and hospitals knowledgeable of HL practices in order to address deficiencies?

**Should nursing facilitate interprofessional collaboration to advance health literacy?** Nurses are at the forefront and can make the greatest difference as the largest segment of health care providers; according to the CDC only 20/50 U.S. states report having initiatives to improve health literacy.


Could nursing take the lead and consider a review of the states that have provided an excellent example of how to establish a strong and meaningful statewide health literacy organization and begin initiatives to replicate?
1. Link quality of care with improving broader health & health literacy. The concepts need improved clarity and definition.

2. **Systems need to make health literacy a Priority** (Koh et. al.)

3. The issue would be more salient locally if the health literacy problem could be described contemporaneously and regularly in regional, state, and community populations.

4. The established link between limited health literacy and poor outcomes needs repetitive communication and linkage to system’s emerging accountabilities and risk for population outcomes.

5. The issue would be more visible on local health system agendas if they had the tools to personalized the issue to local enrolled, or patient, or ACO populations.

6. **The lack of valid, reliable, useful and affordable practical public accountability & improvement HL performance measures are a relative barrier to action and accountability for that action.**

7. More examples of local action using evidence based health literacy interventions to improve outcomes are needed.

8. **Accreditation programs for health organizations should include more items directly related to health literacy. (the 10 attributes for example).**

9. Financial and non-financial Incentives need to be developed and deployed to motivate action.
Stakeholders Needed for Implementation of a Vision for a Health-Literate America

IOM Roundtable for Health Literacy, 2010

**Health Care System**
- Access to care/provider
- Access to reliable, understandable information and materials
- Infrastructure support for good patient-provider interaction
- Clear communication at all levels
- Health law, patient rights and responsibilities
- Technology

**Society**
- Community-based supports and infrastructure, engagement with other sectors (education, healthcare, etc)
- Support for individuals’ role in home-based health care

**Media**
- Access to reliable, understandable information through variety of media channels

**Government**
- Health plan purchasing
- Drug labeling and advertising
- Regulatory role
- Health education role

**Business**
- Employee health and safety and literacy programs
- Health plan purchasing
- Partnership with other sectors
- Role of PHARMA in health literacy

**Education**
- Literacy Education
- Health & science in K-12 curriculum
- Adult education
- Health professionals education

**Improved Health Literacy and Health Outcomes**
Resources

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https://ainihl.nursingnetwork.com/
Resources

• 10 Attributes of a Health Literate Organization Institute of Medicine (PDF - 102 KB) | Slide Presentation

• Adult Basic Education Programs (GED prep)

• Community Resource Centers

• Center of Disease Control and Prevention Health Literacy for Public Health Professionals Centers for Disease Control and Prevention

• Effective Healthcare Communication 100 (Course ID 1010508). This course does not offer continuing education credits.

• Health Literacy Universal Precautions Toolkit Agency for Health Care Quality and Research

• Plain Language.gov -- Improving Communication from the Federal Government to the Public Culture, Language and Health Literacy


Resources

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