Prescription Literacy

LEARNING ACTIVITY

Description
Relaying pharmaceutical specifics to patients of any health literacy level can be a challenge. To communicate prescription information effectively to all individuals and especially those of low health literacy requires a clinician perception that any details can be misconstrued, read incorrectly or not read at all. These learning activities are designed to instill health literacy and health numeracy principles and practices when writing and educating a patient who is being prescribed a healthcare medicament.

Competencies

C2. Effective Communication and Health Literacy

- C2.1 Health Literacy
  - Recall that the average U.S. adult reads at a 5th grade reading level, but that most patient education materials are written at a much higher reading level.
  - Understand that adults with low or limited health literacy tend to experience shame, and hide their lack of skills from oral healthcare providers.
  - Recognize “red flag” behaviors which may suggest a patient has low or limited health literacy.
  - Express attitude that everyone regardless of literacy level benefits from and prefers clear communication.
  - Recognize ethical and legal implications for inadequately conveying health information to patients with low or limited literacy or health literacy.

- C2.5 Patient-Centered Care in Clinical Practice
  - Schedule routine medication or treatment plan review with patients during clinic visit (e.g. ask patient to bring all medications and supplements to appointment to review name, purpose, dosing, side effects or interactions).

- C2.6 Communication Techniques
  - Ask patients to repeat back information or instructions (teach-back or “show me” method).
  - Use patient-friendly materials and aids to reinforce important verbal information (e.g. print material, video, model or x-ray).
  - Apply low numeracy strategies to convey numeric information to patients (e.g. risk, side effects, and dosing instructions) in verbal and written communication.
  - Write/rewrite clear medication instructions (e.g., “after brushing your teeth, fill chlorhexidine mouthwash cup to fill line (15ml), swish in your mouth for 30
seconds, then spit out, don’t swallow solution, do this every morning and evening," rather than “after brushing, rinse with 15ml of chlorhexidine for 30 seconds, then expectorate, perform twice daily.”) and follow-up procedures or directions.

Learning Outcomes

- Apply health literacy and numeracy principles when writing and presenting patient prescriptions.
- Perceive that all patients need clarity and clinician assurance when pharmaceuticals are introduced in patient care.
- Recognize “red flags” and the need to reconfirm patient understanding to ensure prescription compliance.
- Develop strong attitudinal values empowering practice of health literacy and numeracy principles with unbiased, culturally sensitive patient-centered care.

Activity 1

Case Scenarios:

Include the following two prescription case scenarios to create awareness and generate student discussion on missteps and best practices when prescribing prescription or over the counter medicaments/products.

Role-playing the scenarios will encourage student engagement, incite student thought, and enhance interaction and application.

As the activity facilitator, place your main emphasis is on “what would you do differently?”

Prescription Case #1

Assessing and Addressing Health Literacy

...I had some papers, but I didn't know they were prescriptions and I walked around for a week without my medication. I was ashamed to go back to the doctor, but a woman saw the papers I had and told me they were prescriptions. It's bad to not know how to read. After getting my medicine, I had to come back and ask how to take them because I was urinating too much. They told me I was taking double the medication I was supposed to. I had two bottles and I was taking one from each bottle, but it turned out they were the same medication. But since I don't know how to read, I didn't know.
Prescription Case #2

The Problem in Following Doctor’s Orders

Mr. M was a typical new patient: 74, with diabetes, hypertension, and elevated cholesterol. He had some prostate enlargement and back pain. His bag of pill bottles was depressingly bulky. I spilled the bottles out at our first visit, sorting them by disease.

A thick shock of white hair spilled over most of his forehead, framing skin that was weathered from a lifetime of outdoor work-farming as a teenager in Mexico, construction as an adult here in the United States. His smile was bracketed by concentric rings of creases. Mr. M didn’t remember the names of all the medicines, but he did know that the white pill was for “pressure” and that there were two pills for diabetes. Something also for cholesterol and prostate.

The visit took nearly an hour as I painstakingly explained each medication, matching the names on the bottles to the pill inside and the disease it was intended for. I cleaned up his medication list in the computer, purging expired or redundant meds and then printed the list for him to take home a list that was clear, organized, and most important, legible.

Despite running over our scheduled time, I felt gratified that I had brought some clarity to my new patient’s medical conditions. Plus, I was meeting one of the patient-safety goals mandated by our hospital.

At our next visit, I plucked out the bottle of lisinopril, the one new medication we’d started last time. “How does the new blood pressure pill feel?” I asked.

“Is that the one I take twice a day?” Mr. M asked.

“No, it’s once a day,” I said, pointing to the label. “The metformin for diabetes is the one you take twice a day.”

He unscrewed the top of the next bottle and peered in. “I take these before breakfast.”

I reached for the bottle and squinted at the label. “This is the one for your cholesterol. You have to take it at bedtime.”

Mr. M was clearly still confused about his medicines, a not uncommon occurrence in this age of poly-pharmacy. Patients routinely juggle 7 to 10 medications, many of which change at each visit.

And a low level of health literacy, which the national report Healthy People 2020 defines as “the capacity to obtain, process, and understand the basic health information and services needed to make appropriate health decisions,” is surprisingly common among older adults. It is especially common in those who have the most diseases and the fewest resources.

For the next few visits, I spent all our time assiduously reviewing his pills and medication list. I referred him to an eye doctor to ensure that the diabetes was not affecting his vision.

I arranged for a weekly visiting nurse to help him prepare a week’s worth of medications in a pillbox.
In short, I did all the things that are recommended to assist a patient with low health literacy.

**It was a year into our relationship when Mr. M finally told me the truth. I was typing up yet another beautifully manicured medication list to help keep him organized.**

“Doctor,” he said, his voice faltering, “You don’t have to keep giving me those lists.” He looked down at his lap for a moment. “The truth is that I can’t read. Not in English, not in Spanish. Nothing at all.”

Despite knowing that true illiteracy exists, I was still shocked to come upon it in real life. No wonder Mr. M couldn’t keep his medications straight. He smiled faintly, then shrugged.

I recalled my travels to countries where I didn’t speak the language; I’d felt so handicapped. To imagine that situation complicated by illness was frankly terrifying.

Watching Mr. M fumble with his bottles, unsure which pill was twice a day, which once, unnerved me, as I envisioned mix-ups and overdoses. That he had succeeded this far was a testament to his resourcefulness and perseverance. However, I worried about his future, his ability to juggle multiple chronic illnesses and to navigate a complex medical world.

Most patients don’t offer up that they have low health literacy-let alone the fact that they can’t actually read. Many expend great effort to compensate or hide it. Nevertheless, it is a powerful detriment to good health and we in the medical world need to be on the lookout for it.

Mr. M and I opened up his pill bottles. We extracted a pill from each and taped it onto a piece of paper. I drew a sun next to the ones that needed to be taken in the morning and a moon next to the ones for nighttime. He left my office with sheet of brightly colored pills; a rainbow like guide that I hoped would offer him access to the quality medical care he surely deserved.

My kindergarten-age daughter is just beginning to read and she is taken aback with delirious joy each time a few random letters suddenly form a word that matched real life. It’s a painstaking process for her, but as I watch her I think about how this skill has powerful ramifications for her health and longevity. It’s a gift, really, one that I’d long to transfer to Mr. M if I could.

**Activity 2**

**Prescription Samples and Examples:**

- Students identify a typical prescription or nonprescription drug (medical or dental related) and write out a poor example of prescription labeling, correct that label and role-play verbal and written methods to ensure patient comprehension for successful implementation. A provider follow-up method is identified to ensure patient compliance.
- Students find actual prescription bottle labels to critique. These samples are evaluated for ease with patient comprehension and compliance based on new knowledge of health literacy and numeracy.
Student Assessment

Student comprehension and application of health literacy and health numeracy principles can be assessed as students explain, “What they would do differently” with the case scenarios, and prescription labeling and presenting. It will be important to have the student self-evaluate and reflect on their ability to recognize literacy “red flags” during clinical experiences. This is also an ideal opportunity to determine the student’s commitment to compassionate, patient-centered care with communication as key to achieving successful patient outcomes.

Resources

Health Numeracy: PowerPoint Presentation
http://healthliteracymn.org/resources/presentations-and-training

Prescription Literacy: A Review of the Problem and Recommendations

How to Create a Pill Card
Prepared by the Pharmacy Intervention for Limited Literacy (PILL) Study Research Team

Fortuna, J., Low Health Literacy: Red Flag Warning Signs Medbridge 2019

Learning Activity Case Studies retrieved from:

Assessing and Addressing Health Literacy

The Problem in Following Doctor’s Orders

Additional applicable resources are listed in the Numeracy Learning Activity.

Suggested Placement within Curriculum

These learning activities fit well into a Pharmacology course within a dental or healthcare provider curriculum. Extend the learning opportunity to student clinical experiences and all of the competencies and learning objectives will be reinforced.