



Teaching Students to Evaluate and Provide Consumer Health Information

Kelly L. Scolaro, PharmD and K.T.L. Vaughan, MSLS, AHIP
The University of North Carolina, Chapel Hill, NC



INTRODUCTION

- Consumer Health Information (CHI) is designed for the general public. Functional Health Literacy (FHL) measures the ability to understand and apply health information.
- The recommended reading level for CHI is 6th to 8th grade.
- Student pharmacists need practice reading, evaluating, and writing CHI.

OBJECTIVE

- To develop PY1 students' abilities to evaluate and provide consumer health information (CHI) via writing exercises.
- This consisted of three aspects: knowledge of the topic of CHI and FHL; skills in recognizing and communicating CHI; and a positive attitude towards the pharmacist's role in CHI.

RESULTS

Self-Reflection Papers

- 148 students responded to the video.
- 98% of students recognized low FHL is a serious problem with a high level of shame attached.
 - Many were surprised by the extent of the issue.
 - Some mentioned the pharmacist's role in CHI.
- Three students (2%) stated negative comments:
 - "I learned that people are dumber than you might think"
 - "If you talk to people like they're stupid they'll understand"
 - "I keep thinking, if this is such a shameful secret, why not learn how to read better?"

METHODS

Teaching Methods

Self-Reflection	Interactive Lectures	Writing Assignments
Students viewed "Low Health Literacy: You Can't Tell by Looking," an online video from the American Medical Association.	How to Evaluate CHI on the Internet. Students used their laptops in class to explore and discuss alternative medicine websites.	#1: Individual website review. Students picked an herbal or alternative medicine website and wrote a review of the CHI provided.
They then wrote a self-reflection on what they learned from the video. Comments were reviewed by course faculty.	Functional Health Literacy and Tools. Students evaluated instructions for pregnancy tests and patient handouts for diabetic foot disease.	#2: Group patient handout. Teams wrote low-literacy patient handouts about an assigned prescription drug.

- 149 first year pharmacy students enrolled in the Pharmaceutical Care Lab course were involved.
- Writing assignments were graded by faculty using standardized rubrics.
- Comments from the self-reflections and grades on assignments were used to assess the teaching methods.

Website Review Rubric

Evaluation Criteria	Points	Comments
Website chosen provides information on herbal products or alternative therapies	X/4	
Page length is at least one page and no more than three pages and meets font, spacing, and margin format	X/2	
Header of paper includes: 1. Name of the website 2. Website URL 3. Student name 4. TA name 5. Lab day and time	X/5	
Review is complete and covers the following: 1. Type of site (e.g. for profit, non-profit, government, etc.) 2. Target audience (e.g., health care provider or patient) 3. Presentation format (e.g. text only site or multimedia) 4. Site quality/awards (quality of information provided, quality references, user friendly, etc) 5. Unique aspects of site 6. Strengths/weaknesses	X/14	
Review is grammatically correct and free of typographical errors.	X/5	
	Total X/30	

Patient Handout Requirements

1. One page long, both sides of the page
2. SMOG score less than 8.99
3. List at least four references
4. Include the standard information such as:
 - Purpose/use
 - Dosing and administration
 - Side effects
 - Contraindications/precautions

Writing Assignments

Assignment #1 Individual Website Review n=149	Mean 28.2/30 points (94%) High= 30 (n=66) Low = 0 (n=1)
Assignment #2 Group Patient Handout n=54 groups	Mean 31.7/35 points (91%) High= 35 Low= 21

CONCLUSIONS

- Students seem able to synthesize knowledge and skills related to CHI and FHL after exposure to the topic in class.
- Almost all of the self-reflections indicated an understanding of the problem and possible solutions.
- Most students scored well on the writing assignments.
- The self-reflection data indicated the majority of students have positive attitudes about CHI and valued the learning experience.
- Further research is needed to assess the impact of teaching methods on attitudes in practice.