Using Focus Groups to Assess the Information Literacy Skills of First Year Pharmacy Students

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Objectives

• Assess the information literacy skills of entering first year professional pharmacy students
• Understand their knowledge of library resources and services
• Determine if students had previous library instruction
• Develop a information literacy questionnaire for new incoming students
Background

• Arizona Health Sciences Library embed librarians within four of the health sciences colleges: medicine, pharmacy, nursing and public health
• Embedded in the College of Pharmacy since 2007
• Appointed as Clinical Instructor in 2011
Background

• College of Pharmacy
  – 400 professional pharmacy students
  – 80 graduate students in the PhD and MS programs
  – 40 faculty
• Established in 1947
• Ranked #10 by US News & World Report
Information Literacy Standards

• Accreditation Council for Pharmacy Education (ACPE) Standard No. 12
  – “graduates must possess the basic knowledge, skills, attitudes and values to practice pharmacy independently at the time of graduation”
  – “retrieve, analyze and interpret the professional, lay, and scientific literature to provide drug information and counseling to patients, their families or care givers, and other involved health care providers”
Methods

• Approved by the UA Human Subject Protection Program and the Institutional Review Board
• Two 55 minute focus groups over lunch
• Five preliminary questions prior to participation
• Nine open ended questions during the focus group
• Audio recorded and transcribed for common themes
Preliminary Questions

• Students’ educational background including degrees earned and previous library instruction

1. Where are you from?
2. Did you attend a university or 2 year college?
3. Have you earned your bachelors, masters or PhD prior to coming to pharmacy school? If so which one?
4. What year did you earn your degree?
5. What was your major?
Focus Group Questions

1. What kind of experience did you have locating information and conducting research before you came to pharmacy school?

2. Describe your experience with locating resources for your case studies course?

3. What stood out as the most valuable/useful in the library lecture to you?

4. If you could go back in time to the beginning of your first semester, what do you wish you knew about finding information for your courses?
Focus Group Questions

5. If you were asked to conduct a literature review on a topic, how would you begin your search and where?

6. Did you ask for help finding information?

7. What are the top three resources, in order of preference that you turn to most often?

8. What resources outside of e-resources do you use?

9. Is there anything else you would like to add about finding information in the library?
Class Demographics

• Class of 2014
  – 98 students
  – Women: 60%
  – Average age: 23
  – Approximately 50% earned a bachelors degree
  – Underrepresented ethnicity: 45%
  – From community college: 17%
Results from Focus Groups

• Experience
  – Many students were experienced users of library resources
  – Few had previous undergraduate coursework that required them to locate a specific resource in the library
  – Few were familiar with and comfortable with using PubMed
  – Prior to pharmacy school, many had little experience with using library databases
  – Few knew the difference between types of databases in locating information
Results from Focus Groups

• Process
  – Many unfamiliar with using PubMed, MeSH and MD Consult prior to instruction
  – Found step-by-step instruction helpful and useful for their first course
  – Frequent starting point for any search was Wikipedia or Google
  – Comfortable with using familiar databases after lecture
  – Electronic full-text access was important
  – Utilize reference section was useful for locating other relevant articles
Results from Focus Group

• Resources
  – Top databases used:
    • 1) Wikipedia 2) PubMed 3) MD Consult
  – Top non e-resources used:
    • 1) Peers 2) Textbooks 3) Professors
  – Regularly relied on peers
  – Unfamiliar with services of embedded librarian
  – Found lecture from the librarian helpful and relied on resources covered from the lecture
Discussion

• Most students had not have previous library related instruction
• Students benefited from the PubMed lecture
• Some were familiar with the difference between types of literature 1°, 2°, & 3°
• Some used appropriate resources to locate appropriate information, some could not
• Ease of access was important
• Services offered by the librarian were widely unknown
Improving Library Services

• Feedback from students included:
  – During orientation assure students that specific topics would be covered later in the semester
  – Provide information on other databases early in the semester
  – Step-by-step instruction was helpful
  – Repetition is not bad and suggested a follow-up refresher course
  – Create online tutorials allowing students to practice using databases
  – Provide lunch hour tutorials and workshops on other library resources
Limitations

• Library liaison and another librarian conducted the focus groups
• Small group of volunteer students may not be representative of entire class
• Focus groups were conducted at one College of Pharmacy
• Most student obtained pre-pharmacy coursework at the same university or other regional college and may not be representative of other colleges
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