"Quick Literature Searches" Module National Nighttime Curriculum

Pretest Questions:

- 1. The acronym PICO can be used to help develop an answerable clinical question. It stands for:
 - a. Population, Inclusion, Comparison, Outcome
 - b. Patients, Intervention, Controls, Outcome
 - c. Population, Intervention, Comparison, Outcome
 - d. Population, Identification, Cohorts, Outcome
- 2. When using a search engine to conduct a literature search, which of the following is NOT true:
 - a. MeSH terms should be used when available
 - b. The most effective way to limit a search to pediatric patients is to add "pediatric" to the search terms
 - c. Search terms can be connected with "AND, OR, NOT"
 - d. The Clinical Queries feature in PubMed allows the question type to be selected

Posttest Questions:

- 1. The question type and most appropriate study to answer an inquiry regarding the efficacy of inhaled versus oral systemic corticosteroids to treat status asthmaticus is:
 - a. Diagnosis: prospective, blind comparison to a gold standard
 - b. Therapy: randomized controlled trial
 - c. Prognosis: cohort study
 - d. Therapy: meta-analysis of randomized controlled trials
- 2. The question type and most appropriate study to answer an inquiry regarding the natural history of congenital cytomegalovirus infection is:
 - a. Diagnosis: prospective, blind comparison to a gold standard
 - b. Therapy: meta-analysis of randomized controlled trial
 - c. Prognosis: cohort study
 - d. Etiology: randomized controlled trial

Pretest Answers

- C PICO is an acronym used to help remember the essential components of an answerable question. It stands for population, intervention, comparison, outcome.
 Population (or problem) includes descriptors of the type of patients or problems you are inquiring about. Intervention (or prognostic factor or exposure) is what you want to do for the patient including diagnostic tests and therapies. Comparison defines what you want to use as measurement for contrasting your intervention. Outcome includes the variables you are interested in measuring.
- B To perform a successful search, you should use MeSH terms when available, combine search terms with AND, OR, and NOT (in all capital letters), use the Clinical Queries feature in PubMed to help perform the search, and limit the search, using the Limits feature on the results page, if desired. Using "pediatrics" as a search term will generate a significantly less comprehensive search.

Posttest Answers

- D Four basic types of clinical questions exist: Diagnosis, Therapy, Prognosis, and Harm/Etiology. It is important to know the type of question being asked in order to identify the best study to answer it. The question regarding steroid usage in asthma is a Therapy question dealing with the selection of treatments to offer patients. The best study to answer a Therapy question would be a compilation of randomized controlled trials, as done by systematic reviews or meta-analysis.
- C A question regarding natural progression of a disease is a Prognosis question. Prognosis questions answer how to estimate the patient's likely clinical course over time and anticipate likely complications of disease. They are best answered by cohort studies.