Summary of “Quick Literature Searches” Module
National Nighttime Curriculum

I. Create an answerable question.
   a. Use the PICO format
      i. P: population
      ii. I: intervention
      iii. C: comparison
      iv. O: outcome

II. Identify the type of question being asked.
   a. Diagnosis: how to select and interpret diagnostic tests
   b. Therapy: how to select treatments to offer patients that do more good than harm and that are worth the efforts and costs of using them
   c. Prognosis: how to estimate the patient’s likely clinical course over time and anticipate likely complications of disease
   d. Harm/Etiology: how to identify the negative impact of a medical intervention/environmental agent OR the causation of disease

III. Identify the best study to answer the question.
   a. Diagnosis: prospective, blind comparison to a gold standard
   b. Therapy: RCT > cohort > case control > case series
   c. Prognosis: cohort study > case control > case series
   d. Harm/Etiology: RCT > cohort > case control > case series
   e. Meta-analysis and systematic reviews, if available, are usually considered the best available literature as they are compilations of multiple studies

IV. Create a successful search.
   a. Use MeSH terms
   b. Combine search terms with AND, OR, and NOT (in all capital letters)
   c. Use the Clinical Queries feature in PubMed to perform the search
   d. Identify the Category (type) of question
   e. Select the Scope of search, narrow (increased specificity) vs broad (increased sensitivity)
   f. Run the search and click “See All” to scan available articles
   g. Limit the search, using the Limits feature on the results page, if desired

V. Quickly appraise the article.
   a. Use the abstract to scan for validity, statistical accuracy, and applicability
   b. Identify the type of study, the higher up the hierarchy the more internal validity
   c. Identify the population studied
   d. Review the methods section to screen for bias
   e. Review the results section to assess if results were derived logically and their relevance
   f. Make a decision about how applicable the study seems to your patient

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