PICO Tool

As a nurse, you’ll discover that much of the research you will want to complete will focus on the best practice or treatment for a given situation. When you have a need for such specific information, the creation of your research question is particularly important.

P.I.C.O. (Population, Intervention, Comparison, and Outcome) is a mnemonic that can help you create an exact research question out of a patient care or practice situation by considering each of these four areas:

Population—Who is involved? Is there a particular age group, ethnic group, gender, or other patient characteristic(s) you can single out which would help you locate more appropriate results?

Intervention—What is the proposed treatment or course of action?

Comparison—What are you comparing this proposed course of action to? (In other words, if you are looking up a proposed new treatment, the comparison would be the older standard treatment.)

Outcome—What is the result you are looking for?

Example Scenario: Mary, a 57-year old breast cancer patient, is undergoing radiation therapy and complaining of increased fatigue as a result. You want to see what, if any treatment strategies might be used to help reduce Mary’s fatigue.

Population—“Mary, a 57-year old Caucasian woman diagnosed with breast cancer is undergoing radiation therapy.” The target population is Caucasian women diagnosed with breast cancer, 50-65 yrs., undergoing radiation

Intervention— new treatments for radiation-related fatigue

Comparison— in this case, there is no standard treatment suggested for radiation fatigue to compare the new treatments to, so → no action

Outcome—Mary wants to reduce her fatigue level, so the outcome we want to see generally is → reduced fatigue levels in patients (compared to the standard treatment of “no action”)

Main Topic Terms: fatigue women breast cancer radiation treatment Caucasian age range: 50-65 yrs

Research Question: What, if any, treatments reduce patient fatigue in Caucasian women aged 50-65 years undergoing radiation therapy treatment for breast cancer?

Next: Your Turn!
PICO Worksheet and Search Strategy

Define your question using PICO: Population, Intervention, Comparison, and Outcome.

- Population:________________________________________________________
- Intervention:______________________________________________________
- Comparison:_______________________________________________________
- Outcome:_________________________________________________________

- Write out your question:
  ___________________________________________________________________
  ___________________________________________________________________
  ___________________________________________________________________

List the main topics and terms from your question that you can use to search.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Check any limits that may pertain to your search:

___ Age      ___ Language      ___ Year of publication     ___Region/Country

This worksheet is adapted from: Penn State University Libraries’ “Evidence Based Practice Tutorial for Nurses PICO Worksheet” at http://www.libraries.psu.edu/instruction/ebpt/PICOWorksheetSearchStrategy.doc September 26, 2006.