

# The research application of pico to evidence based practice

[Health & Medicine](#), [Nursing](#)



The formulation of a research question is one of the most formidable tasks that a researcher may discover when beginning a project. There are unaddressed questions in the present clinical practice or when the circumstances cause an investigator to compose a clinical research question. This research paper intends to analyze the steps in the composition of a research question. The concepts of PICO (population, intervention control, and outcome) along with evidence-based research will be further examined.

A seven-year-old girl is in an emergency room with severe tinnitus. She has a history of headaches and earaches. Her mother is concerned about the effects of acetaminophen. Her daughter is complaining of stomach problems and nausea after the ingestion of acetaminophen, she is worried about the ringing in her ears. The mother would like to know if the acetaminophen that she has been administering to her daughter is effective or is there a better intervention. This where the concept of PICO and evidence-based practice come into effect for the nursing health care professional. The information must be gathered about the patient. The resources available for treatment must be assessed. The questions that are to be asked by the nursing and health care practitioner are the following:

- ✦ Population.
- ✦ Intervention- Testing and evaluation.
- ✦ Control- Evaluation of the previous treatment methods.
- ✦ Outcome (Aslam & Emmanuel, 2010).

Expanding upon the concept of PICO, there is also an order of importance to the strength of evidence. This order of importance assists in ensuring the validity of the research sources, as the research sources presenting stronger evidence are preferred over the research sources with evidence that presents less strength (Zhao et al., 2010)?

Name

Definition

Population

Categorization of the population. Sex, Co-morbidity, race, age pathology (SCRAP)

Intervention

Testing and treatment applied

Comparison

Other testing and treatment process reviewed as a control

Outcome

The results of the experiment

Example:

For a 43-year-old man with gum disease, how does the effective application of doxycycline to alleviate gum bleeding compared to non-clinical intervention (i. e., aspirin)?

With patients developing a requirement of more effective medical personnel, these trends in the planning and implementation process should be considered:

1. Planning the patient's medical management.

2. Innovation and implementation- The nursing profession is not simply a health care professional. The nursing professional is also an enabler who facilitates the process of healing. Patient-centered care should become a more important concept in medical industry trends and evidence-based research. This perspective for the health care professional is to search for the causes, developments, and outcomes of an illness (Ray, 2004).

Descartes, the seventeenth-century philosopher, perceived that the mind and body belong to a system in which each element must be considered in the healing process (Lemonick, 2002).

Health care is an intensely interpersonal discipline. Nursing is an integral part of health care which connects the health care which connects the health care provider and the health care recipients, there is a greater need than ever for evidence-based practice. Archie Cochrane concluded thirty years ago commonly used procedures and therapies were not the most efficacious and that a substantial amount of practice had not yet been evaluated (Sutherland et al., 2004).

New personnel needs to be motivated into evidence-based practice by the provision of internships and incentives. Health care providers should be better enabled to provide more personalized services. This refined perspective not only improves the abilities of the health care professional, but it also facilitates the potential for pro-social evidence-based practice

(Tamblyn et al., 2005). The medical researcher should be encouraged to apply internet-based technologies and communications. Research should be encouraged to help the greater good (Anderson, 2010). The outcomes of this perspective can be assessed in the following way: Medical administrators can compare the outcomes of health care professionals who were involved in evidence-based research and acute care before and after graduation to the health care professionals who had not been exposed to such rigorous training (Tamblyn et al., 2005).