## "Writing Your Research Question"



Cynthia L. Russell, PhD, RN, Assistant Professor, University of Missouri, Columbia, MO, NATCO Research Committee Member

It seems like everyone has a great idea for a research study. However, translating an idea into a research question that can be studied scientifically can be a challenging undertaking, especially if an individual is fairly new to research. The goal of this brief fact sheet is to provide guidance on how to get through this important first step in completing a research study.

A well-written research question is very focused and specific. If you make the analogy that a research study is much like the human skeleton, you will understand the importance of linking all the parts together for a successful study. The research question is the "spine" of the study since it supports the study design (arms) and methods (rib cage), which then directs the statistical methods (legs). If your research question (spine) is not well constructed, then the entire study (skeleton) collapses. Think of the review of the literature as the "head" of the skeleton since it leads to the spine and must have a strong connection! A well-written research question contains the key variables, the relationship between the variables, and the population to be studied (Norwood, 2000; Polit & Beck, 2004). For example, what is the correlation between hope and uncertainty in individuals awaiting renal transplantation?

Can you identify the problems with the following research questions:

- 1. What are the levels for individuals awaiting renal transplantation?
  - (Answer: the variables to be studied are not identified. Levels of what?)
- 2. Is there a correlation between length of time on the renal transplant waiting list and hope and uncertainty?
  - (Answer: the population to be studied is not identified. Who is being studied?)
- 3. What is the relationship between medication noncompliance in adult renal transplant recipients? (Answer: the variables are not all identified. What is the other variable to be examined in relationship to medication noncompliance?)
- 4. What is the effect of information and support in those waiting for a renal transplant? (Answer: all the variables to be studied are not identified. The effect of information and support on what?)
- 5. What are the levels of hope and uncertainty pre- and post-intervention for individuals awaiting renal transplantation? (Does this have all the hallmarks of a good question?)
- 6. What is the correlation between hope and uncertainty in individuals awaiting renal transplantation? (How about this one?)

There are several good resources for helping you develop your research question. Probably the best resource is an experienced researcher who can ask you questions about your idea to assist you in narrowing the focus and making sure that your research question has all the important components for success. A few research books that you might find helpful are:

## **References:**

- 1. Polit, D., & Beck, C.T. (2004). *Nursing Research: Principles and Methods*. 7th ed. Philadelphia, PN: Lippincott, Williams, & Wilkins.
- 2. Norwood, S. L. (2000). *Research Strategies for Advanced Practice Nurses.* Upper Saddle New Jersey: Prentice Hall Health.

You may also join NATCO's Research list serve at <u>www.natco1.org</u> by logging into the members only section and clicking on "resource councils" and ask for guidance from our experienced members.