

## *How do you find a good research idea?*

Finding a good research idea is not easy. Many established researchers also struggle with this problem. Every clinical research idea and question starts with a clinician being faced by a clinical problem at the bedside. Having a critical mind, identifying an unusual clinical presentation, challenging the clinical management or identifying an unusual clinical course or outcome, often leads to very interesting clinical research.

### **How do you start to find a research idea?**

Clinicians are often faced with interesting problems due to their work. In Southern Africa we have many research opportunities due to the burden of infectious diseases (HIV/tuberculosis) and the cycle of poverty (prematurity, small for gestational age babies, malnutrition). Critical evaluation of the literature reveals that there is very little evidence for the management strategies we apply to these children or knowledge on their outcome. This gap in knowledge is evident on nearly every ward round, clinical discussion or academic meeting. Exploring this lack of evidence, outcome or clinical description leads to excellent clinical research ideas. These gaps are relatively easy to investigate and publish as we have the facilities to investigate these problems – many other low and middle-income countries where these clinical problems occur, unluckily do not have the facilities to do the necessary (often high tech) investigations.

### **What opportunities are there to help find a research idea?**

#### **1. At the bedside, clinical discussion or academic meeting:**

1. Pick an area of interest especially those areas in which you would like to become a senior registrar or in which to develop a career. Being interested in and enthusiastic about the subject is very important!
2. Be curious and ask questions on ward rounds and at meetings. Write down areas of uncertainty that could be researched.
3. In each academic meeting, make at least one note of something that you find interesting or did not know– after a few meetings you will have a long list from which to develop ideas.
4. Review the literature to see what knowledge about your idea is already addressed.
5. Discuss the research idea with your colleagues and mentors/consultants.
6. Find a good mentor to help you develop your research idea.

## **2. Join an established researcher or a research group:**

1. Many researchers or research groups have research ideas that junior researchers can develop into a research question and on which they can do the research.
2. Make an appointment with the researchers in the area in which you are interested and discuss the possible research ideas.
3. Do a literature review on the research idea.
4. Refine the research idea with the help of the researcher/consultant.

## **3. Collaborate with other Departments/institutions:**

1. New technology creates many unanswered questions. By collaborating with other Departments/ institutions you will be able to develop excellent research ideas.
2. Discuss your idea with a consultant in your Department and see if your research idea is appropriate.
3. Review the literature.
4. Together with your consultant/mentor approach the relevant Department and discuss the research idea.
5. Refine your research idea.
6. Develop a clear memorandum of understanding with the other Department/ institution especially regarding data.

There are many other ways of developing a research idea. These are just a few examples that will help the majority of junior researchers. Any curious and critical thinker will find many other ways of developing research ideas. While you are going through the process of developing a critical mind, you will find it frustrating that some clinicians come up with many research ideas while you struggle to find a single good idea. The art of developing research ideas comes with time and you only need one good idea to start with. Use those around you to help develop your idea: be alert.

**TIP:** If you think or hear of a good research idea, write it down. It is surprising how quickly you can forget the idea.

Once you have found a good research idea it would be wise to apply the FINER criteria to it.<sup>1</sup>

---

1 Thabane L, Thomas T, Chengln Ye, Paul J. Posing a research question: not so simple. Can J Anaesth 2009; 56:71-79.

F: Is it feasible?	Can it be done in the time frame available? Are the data or enough patients available? Are data from a pilot study available?
I: Interesting?	Does it interest you? Does it interest your mentor? Does it interest collaborators?
N: Is it novel?	What does the literature say? What is the opinion of your mentor? Are others doing it in your institution?
E: Is it ethical?	Will the study receive ethics approval? Are there ethical obstacles?
R: Is it relevant?	Will it add to the body of knowledge? What is your mentor's opinion? Will this change practice? Will this lead to more/new research?

Once you have identified your research idea it will be to your advantage to brainstorm the idea with an independent group of researchers. A presentation of your idea will help you refine your idea and address some of the concerns you might have after applying the FINER criteria.

**TIP:** Brainstorming at the start leads to the development of a more precise research question and saves time later.

You now have identified a good research idea and need to develop a precise research question (Step 4).

Before you develop your precise research question it is advisable to find a good mentor or two to help you.

Gie, R., & Beyers, N. (2014). Getting started in clinical research: Guidance for junior researchers. Cape Town: Department of Paediatrics and Child Health, Faculty of Medicine and Health Sciences, Stellenbosch University.