Case Studies

# Chapter 15: Sampling

The case study students have been considering the following research questions and hypotheses and are trying to decide which sampling strategy to use and potential participant inclusion and exclusion criteria. Review the following:

*An RCT - Preterm babies who are exclusively fed their mother’s breast milk gain weight faster than preterm babies who receive formula milk.*

The aim is to recruit 1000 babies each for the experimental (breast milk) and control group (formula milk) (i.e., 2000 babies in total). The babies will be recruited from 10 different neonatal units in a specific geographical area. A research nurse in each care setting will oversee participant recruitment and the day-to-day conduct of the study in the neonatal unit. All of the research nurses have been recruited specifically to work on this study and all are neonatal nurses. Prior to this study, some of the research nurses worked on the neonatal unit in which they are now based whilst others have been recruited from external care settings. The research nurses will all be responsible to the study’s Chief Investigator. All the required ethics and access approvals have been obtained. The intention is to commence the babies on the type of milk to which they have been allocated as soon as gastric feeds are commenced. The babies will be monitored whilst being cared for in the neonatal unit and for 6 months post-discharge.

*A phenomenological study – What is the lived experience of teenagers with chronic renal failure?*

The aim is to recruit teenagers from one children’s hospital. The teenagers will be recruited from the renal out-patients clinic and the renal unit. A research nurse who prior to this study worked on the renal unit at the hospital will oversee participant recruitment and conduct of the study. The research nurse will be responsible to the study’s Chief Investigator. All the required ethics and access approvals have been obtained. The intention is to interview the teenagers at least once, either in their homes or in the care setting.

* Select one of the scenarios above
* Having read the scenario do you think that the selected research method/design is feasible? Think about this with specific regard to participant recruitment/sampling and potential ethical issues. If you do not think that the study is feasible, suggest an alternative method/design.\*

Consider the following questions. If you have suggested an alternative method/design, answer the following questions in relation to that:

* Identify which sampling strategy (probability or non-probability) should be used and give a rationale for your decision.
* Select the most appropriate specific sampling strategy for the study, giving a rationale for your decision and your exclusion of other options.
* Devise potential participant inclusion and exclusion criteria for the study and provide a rationale for these.
* Identify any potential ethical or logistical factors that may impact successful recruitment and participant engagement.
* Suggest strategies that the research team could employ to try to minimise the potential impact of these ethical or logistical factors and to promote participant engagement.

**To reveal a possible answer for the first scenario toggle the show/hide button (¶) or press Control + Shift + 8.**

The outline of the RCT indicates that the babies will be commenced on either breast milk or formula milk as determined by the andomizedon process. Whilst some mothers may find this acceptable, many will have decided during their pregnancy which method of feeding they plan to adopt. Inevitably, some babies will be andomized to receive the type of milk that does not correlate with the mother’s choice. This could have a negative impact on compliance and indeed is unethical. An alternative method of allocation to either the experimental or control group should therefore be adopted such as stratified random sampling (see Figure 15.2)