

Convenience Studies: Ethical Considerations

Amina White, MD, MA, FACOG
Department of Obstetrics and Gynecology
University of North Carolina at Chapel Hill

Task Force on Research Specific to Pregnant Women and
Lactating Women
November 7, 2017

Disclaimer

2

- I have no conflicts of interest to declare.
- The views presented are my own.

Objectives - Convenience Studies

- Description
- Potential benefits in research involving pregnant/lactating women
- Ethical considerations
- Summary

Convenience Studies - Description

- Convenience sampling involves
 - Collecting data from individuals who are easily accessible to the investigator
 - Type of non-probability (non-random) sampling
- Ex) Women who present to labor & delivery or outpatient clinic during a certain time period

Convenience Sampling - Benefits

5

- Potential benefits
 - Convenience of sampling
 - Helpful for pilot studies and for hypothesis generation
 - Qualitative or quantitative data collection
 - Often faster, less expensive to implement than random sampling

Convenience Sampling - Disadvantages

6

- Disadvantages
 - Selection bias: participants usually not representative of the population
 - Ex) “the recruited study population was less ethnically diverse, more affluent and more educated than the background population of pregnant women in Vancouver”

Convenience Sampling - Ethical Considerations

7

- Several requirements for clinical research to be ethical
- Fair subject selection is one requirement:
 - Scientific objectives, not privilege or vulnerability, should determine the selection of participants
 - Fair balance of burdens and benefits from research participation
- Ex) May be more convenient to recruit pregnant women who speak English, have transportation, etc.

Convenience Sampling - Ethical Considerations

- Could be ethically appropriate for
 - Recruitment when resources are limited
 - Little is known about a behavior or exposure, and pilot data would be useful
 - Attempts made to reduce biased selection
- Best when merged with additional methodologies for random representative sample

In summary

- Convenience studies, while limited by selection bias, can be a feasible and ethically appropriate way to begin filling research gaps with preliminary or pilot data

Thank you

10

References

11

- Emanuel, Ezekiel J., David Wendler, and Christine Grady. "What Makes Clinical Research Ethical?" *JAMA* 283, no. 20 (May 24, 2000): 2701-11.
- Hedt, Bethany L., and Marcello Pagano. "Health Indicators: Eliminating Bias from Convenience Sampling Estimators." *Statistics in Medicine* 30, no. 5 (February 28, 2011): 560-68.
- Webster, Glenys M., Kay Teschke, and Patricia A. Janssen. "Recruitment of Healthy First-Trimester Pregnant Women: Lessons from the Chemicals, Health & Pregnancy Study (CHirP)." *Maternal and Child Health Journal* 16, no. 2 (February 2012): 430-38.