## **Week 4 Discussion**

Hi all,

The difference between quantitative and qualitative data is qualitative data are words that describe something, such as gender and religion while quantitative data is numbers such as blood pressure, weight or number of people/population. "Quantitative data are the outcome of counting or measuring attributes of a population," (Holmes et al, 2017). "Quantitative research is based on a traditional, formal, objective, scientific approach in which numbers (numerical data) are collected and used to produce knowledge or information [while...] qualitative studies do not investigate cause and effect; nor involve the effect of interventions, (Chamberlain, 2024)." The knowledge gained from qualitative studies can be used as statistical data of different variables like patient experiences and feelings, mindsets, or ideas. Both types of studies are important in Nursing.

The study design I found interesting was the Quasi-experimental design which is "more common in nursing studies, mimics experimental except for the selection and assignment of subjects, used to examine causal relationships or determine the effect similar to true experimental; lacks control over the manipulation of treatment, management of the setting, and/or selection of the subjects, uses convenience sampling, comparison groups are already existing [which means, its] not a true control group, (Chamberlain, 2024)."The benefits of quasi-experimental studies are that they cost less while requiring fewer resources as opposed to individual randomized cluster trials, (Schweizer et al, 2016). I believe this strategy would be the best help for my nursing issue pneumonia r/t flu vaccination in older adults.

My picot is (P) in patients greater than 65 years of age (I) can using an influenza vaccine (C) compared to not using the vaccine (O) reduce the risk of not contracting pneumonia (T) during flu season? I would use quantitative research in the quasi-experimental study design because it uses convenience sampling which is cost effective and let say if I were to use cluster sampling, there are 53 Emergency departments in New York City, (NYC.GOV, n.d.). Cluster sampling is better for a large population but can cost more money. With the convenience sampling technique, the participants would be chosen at one hospital using medical records database. When a patient comes in to the ED, an ED nurse triage note and ED nurse note is completed of which patient vaccination status, their age, and complaints that brought them in are put in.

## References

Chamberlain University, NR 439 (2024) Week 4Lesson: Designs: A Plan to Study for the Truth

Holmes, A., Illowsky, B., & Dean, S. (2017). Introductory Business Statistics. OpenStax. https://openstax.org/books/introductory-business-statistics/pages/1- introduction

Houser, J. (2018). Nursing Research: Reading, Using, and Creating Evidence (4th ed.). Jones & Description of the Evidence (4th ed.). Jones amp; Bartlett.

NYC.GOV. (n.d.). NYC Health Data. EpiQuery | Search for data, surveys and records on the health of New Yorkers. https://a816-health.nyc.gov/hdi/epiquery/visualizations?