Clinical Reading Questions #5

HST 190: Introduction to Biostatistics

These discussion questions are based on Chowdhary et al. (2020).

- 1. Identify the main research question of the study.
- 2. Who are the subjects in this study, and how many are included? What information was collected?
- 3. How was data collected? What effect might that have on the results? (possibility of bias, generalizability of results, ability to assess trends, etc.)
- 4. Table 2 reports the results of three separate two-sample t-tests for a difference of means. Are these tests paired or unpaired?
- 5. Do you think the assumptions necessary to conduct a valid two-sample t-test are met? if you are unsure, what additional information would help you to evaluate the assumptions?
- 6. The observed difference in mean women faculty ratio % for MO programs is slightly smaller than for SO programs, but the resulting p-value for MO is much smaller than for SO. Why might that be, based on information provided in this paper?

References

Chowdhary, Mudit, Akansha Chowdhary, Trevor J Royce, Kirtesh R Patel, Arpit M Chhabra, Shikha Jain, Miriam A Knoll, Neha Vapiwala, Barbara Pro, and Gaurav Marwaha. 2020.
"Women's Representation in Leadership Positions in Academic Medical Oncology, Radiation Oncology, and Surgical Oncology Programs." JAMA Network Open 3 (3): e200708. https://doi.org/10.1001/jamanetworkopen.2020.0708.