

## What is stataphobia?

Abdel-Hady El-Gilany

Faculty of Medicine, Mansoura University, Mansoura, Egypt.

\*. **Corresponding author:** Abdel-Hady El-Gilany. Faculty of Medicine, Mansoura University, Mansoura, Egypt. Phone: +201060714481. Email: [ahgilany@gmail.com](mailto:ahgilany@gmail.com).

**Cite this article:** Abdel-Hady El-Gilany. What is stataphobia? Int J Epidemiol Health Sci 2023;4: e53. Doi: 10.51757/IJEHS.4.2023.701095.

### Abstract

This letter is about stataphobia, which is an interesting and common phobia among researchers from various disciplines but is not well-known. The definition, causes, impact on research productivity, and treatment options for stataphobia are briefly discussed.

**Keywords:** Fear, Medical statistics, Barrier, Research

Statistics is a branch of mathematics concerned with data, which includes various study methods, data collection, analysis, presentation, and interpretation. Statistics are used in a variety of scientific fields, including medicine, public health, and epidemiology. Statistics and medicine are complementary. Statistics are used to study diseases, patients, and epidemiological events, and medicine frequently employs probabilistic statistics (1). Medical statistics is a combination of medicine and statistics.

Healthcare workers (HCW) cannot understand and interpret medical and health-related publications unless they are familiar with medical statistics. Despite the importance of statistics and research methods in medicine and health sciences, HCW frequently finds statistics boring and intimidating. Medical scientists frequently dislike statistics and are unable to use them effectively (2,3). The term stataphobia was coined to describe this phenomenon, which is common in medicine. Stataphobia is distinct from numerophobia and arithmophobia, which both refer to a fear of dealing with numbers or mathematics (4).

Stataphobia is defined as a fear of research designs and statistics that is out of the ordinary. It is a rapidly progressing researcher disorder caused by statistical illiteracy and ignorance (5,6).

One of the primary causes of stataphobia is a scarcity of well-trained statistical experts, particularly in developing countries. Other causes include a lack of

curiosity or interest in statistics because it is perceived as a difficult discipline, a dislike of mathematics, poor teachers, a lack of practical application, a lack of text textbooks, and a lack of statistical programs (7).

Stataphobia is one of the research barriers that contributes to the low number of publications in developing countries. It makes publication, tenure, and scientific recognition impossible (8,9).

Statistical courses should be required in both graduate and postgraduate medical education to combat stataphobia (10). These courses should be based on a solid database of stataphobia prevalence and causes. All researchers should have access to statistical consultation, personal computers, and statistical software. Statistical fears will be alleviated through practical sessions and the application of statistical methods, data management, and analysis. Increasing public awareness and interest in medical statistics is a long-term strategy.

**Conflict of interest:** None.

**Funding:** None.

**Ethical consideration:** None.

## References

1. Yan, F., Robert, M., Li, Y. Statistical methods and common problems in medical or biomedical science research. *Int J Physiol Pathophysiol Pharmacol* 2017;9(5):157-163.
2. Kurichi, J.E., Sonnad, S.S. Statistical methods in the surgical literature. *J Am Coll Surg* 2006; 202:476-84.
3. Bajwa, S.J. Basics, common errors, and essentials of statistical tools and techniques in anesthesiology research. *J Anaesthesiol Clin Pharmacol* 2015; 31:547-53.
4. Feldman, R. Numerophobia Psychological disorder. *Understanding Psychology*. McGraw-Hill Education (India) Pvt Limited, 2004.
5. Urban Dictionary. Stataphobia. Accessed on: December 25, 2022. Available from: <https://www.urbandictionary.com/define.php?term=Stataphobia>.
6. Supercourse Newsletter. January 6, 2013. Accessed on: December 25, 2022. Available from: <https://www.bibalex.org/isis/frontend/static/SupercourseArchive/6January2013.pdf>.
7. Nguyen, D. Statistics Too Boring? Published on June 29, 2018. Accessed on: December 25, 2022. Available from: <https://www.namnguyen.com/posts/statistics-boring>.
8. Khalaf, A., Aljowder, A., Buhmaid, M., Alansari, M., Jassim, G. Attitudes and barriers towards conducting research amongst primary care physicians in Bahrain: a cross-sectional study. *BMC Family Practice* 2019;20:20.
9. Safdari, R., Ehtesham, H., Robiaty, M., Ziaee, N. Barriers to participation in medical research from the perspective of researchers. *J Edu Health Promot* 2018;7:22.
10. Onwuegbuzie, A., Wilson, V. Statistics anxiety: Nature, etiology, antecedents, effects, and treatments—a comprehensive review of the literature. *Teach Higher Educ* 2003; 8(2):195-209.