Brain Talk

Mini-medical school for families of patients with neurological disease

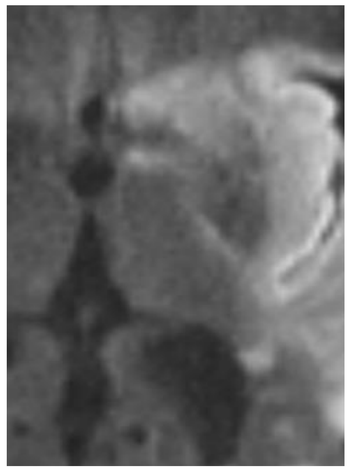
Andrew D. Williams, D.O., M.S., Suhas Gangadhara MBBS., M.D

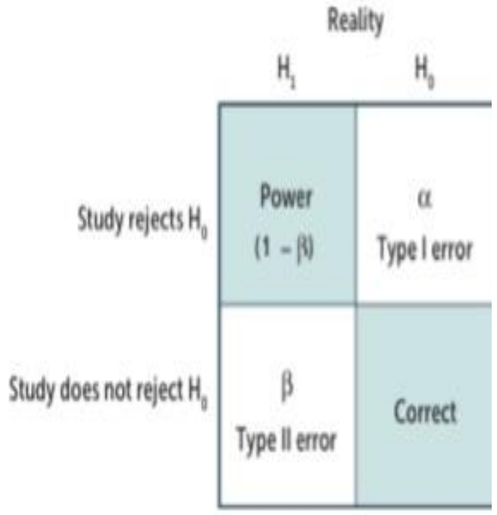
University of Kentucky

College of Medicine
Department of Neurology

BACKGROUND

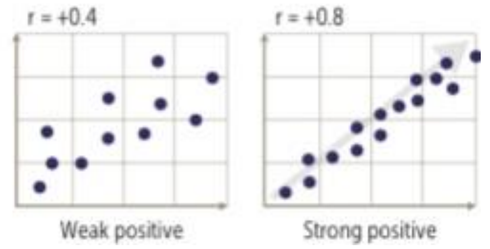
Some literature suggest that many patients and patient's caregivers do not feel adequately educated on their neurological disease 1. This should come as no surprise considering that medical students and residents cite insufficient education as being a focal contributor to their lack of confidence in managing a patient with neurological disease 2. From the caregiver's perspective, the lack of neuroeducation is likely to be multifactorial and possibly includes infrequent exposure to neurology until an acute disease process and insurance/financial constraints limiting access to neurologists. In addition to paltry exposure, medical students/residents may also be affected by "neurophobia."





RESULTS

The pre-intervention surveys will provide substantial data on the familiarity of basic neurological concepts of both educators and learners. At the end of each session, both educators and learners will be evaluated subjectively and objectively by post-intervention surveys and game-based formative assessments, respectively.



OBJECTIVES

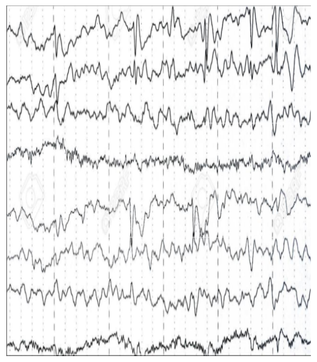
To provide basic educational insights into common neurological diseases in the in-patient setting with the aims of 1.) increasing neurological literacy for University of Kentucky patients/support systems, 2.) equipping medical students/junior trainees with the necessary tools to simplistically teach a diverse audience complex medical concepts, and 3.) enhancing decision-making between patient and provider.

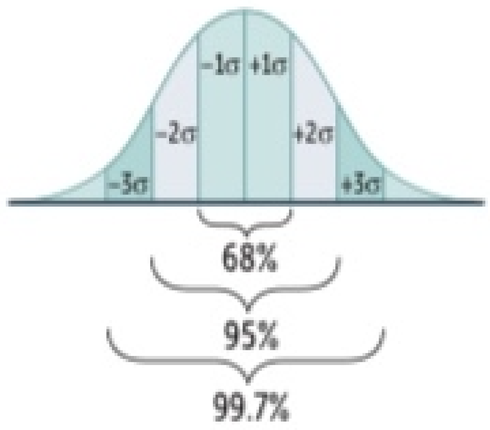
CONCLUSIONS

This project is ongoing with a tentative plan to release preliminary data in the spring of 2025. We hypothesize that a statistically significant number of educators and learners will have a greater understanding of common neurological diseases in the in-patient setting. Ultimately, we anticipate improved informed decision-making between patient and provider. And while this is not a primary end-point of this study, it is possible that models like this can be adapted at other academic institutions and possibly increase the number of residency applicants pursuing a career in neurology.

METHODS

We utilize an active-learning format which provides the educators (medical students/junior trainees) an opportunity to solidify basic neurological concepts while empowering the community of learners (patient's families/caregivers) with adequate neuroeducation on common in-patient pathology. We use a combination of traditional lectures and surveys (pre-intervention and post-intervention) to meet our three aforementioned objectives 3.





REFERENCES

1. Chiò, A., Montuschi, A., Cammarosano, S., De Mercanti, S., Cavallo, E., Ilardi, A., Ghiglione, P., Mutani, R., & Calvo, A. (2007). ALS patients and caregivers communication preferences and information seeking behaviour. European Journal of Neurology, 15(1), 55–60. https://doi.org/10.1111/j.1468-1331.2007.02000.x

2. Zinchuk, A. V., Flanagan, E. P., Tubridy, N. J., Miller, W. A., & McCullough, L. D. (2010). Attitudes of US medical trainees towards neurology education: "neurophobia" - a global issue. BMC Medical Education, 10(1). https://doi.org/10.1186/1472-6920-10-49

3. Kalleny, N. (2020). Advantages of kahoot! game.based formative assessments along with methods of its use and application during the COVID-19 pandemic in various Live learning sessions. Journal of Microscopy and Ultrastructure, 8(4), 175. https://doi.org/10.4103/jmau.jmau_61_20