



Pilot: Hematology/Oncology Curriculum for the Internal Medicine and Hematology/Oncology Sub-internships

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Introduction

- Cancer is the second most common cause of death in the U.S. Despite the increasing prevalence of malignancies, there is limited information on best practices to effectively educate medical students.
- Medical students are taught hematology/oncology (heme/onc) in the first two years of medical school via lectures. During their 3rd and 4th years, students can rotate through the inpatient heme/onc service. However, formal teaching is often lacking, leading to medical student discomfort with complex heme/onc topics.
- A study performed by Mattes et. al. showed that U.S. medical students were less confident in their understanding of cancer treatment than the basic science of cancer.
- Tsai et. al. demonstrated that the implementation of a formal heme/onc lecture curriculum improved resident self-reported confidence and knowledge.
- We piloted a lecture-based curriculum to help medical students improve their knowledge and comfort with heme/onc topics while completing clinical rotations.

Methods

- Internal medicine residents and faculty developed interactive, 60-minute lectures on multiple myeloma and lymphoma.
- The pilot was completed between April to July 2024, and all rotators were invited to participate.
- The curriculum was assessed via pre and post-lecture surveys, which featured questions on knowledge of and comfort with the topics.
- Comfort level was assessed via a scale ranging from one to five, with one representing very uncomfortable and five representing very comfortable.
- Knowledge level was assessed via a quiz, with a maximum score of six points, that was incorporated into the survey.
- For data analysis, R studio was used to run Wilcoxon tests.

Results

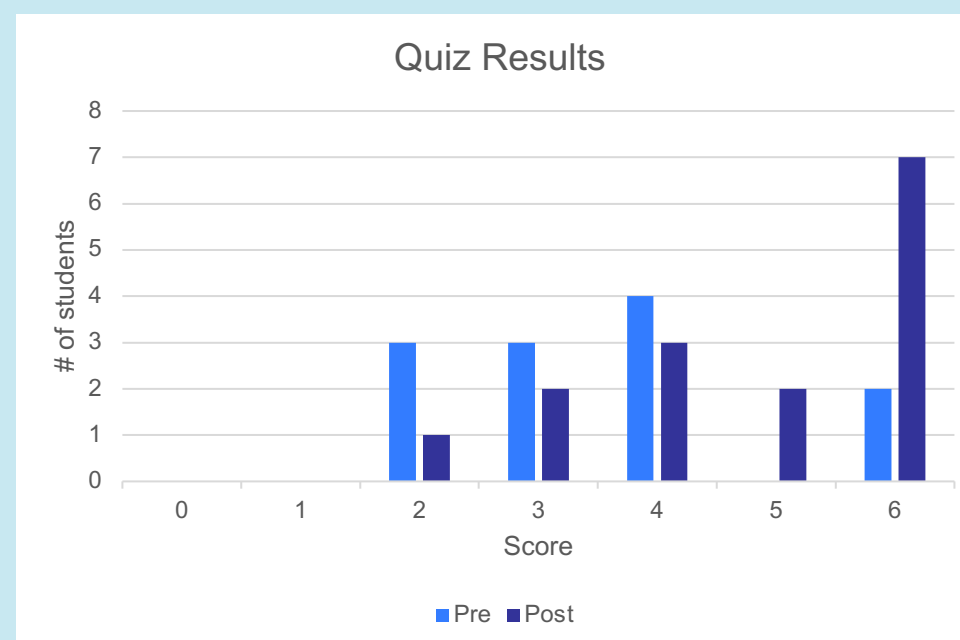


Figure 1: Comparison of pre- and post-lecture quiz results

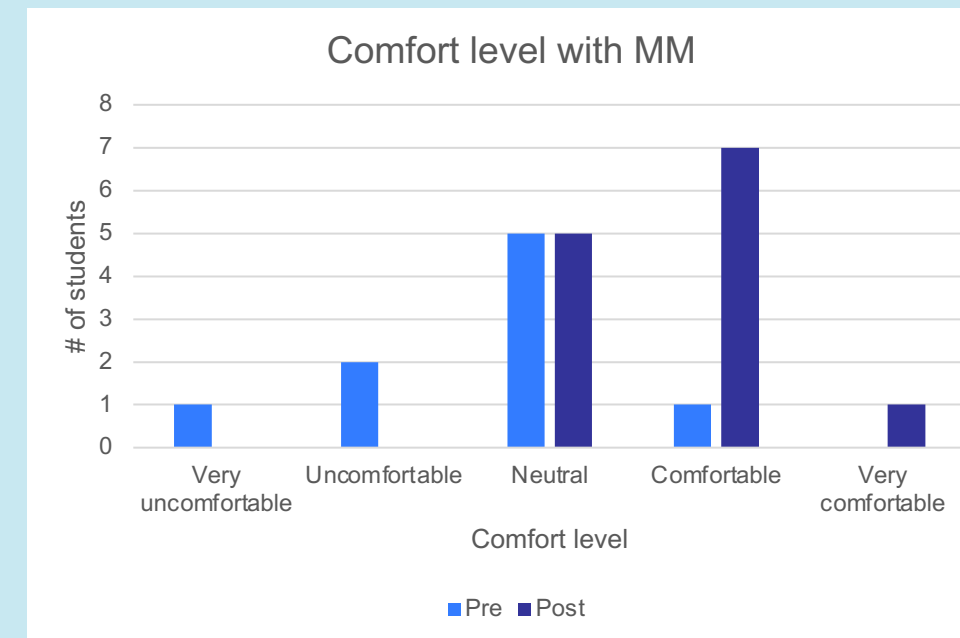


Figure 2: Comparison of pre- and post-lecture comfort level with multiple myeloma

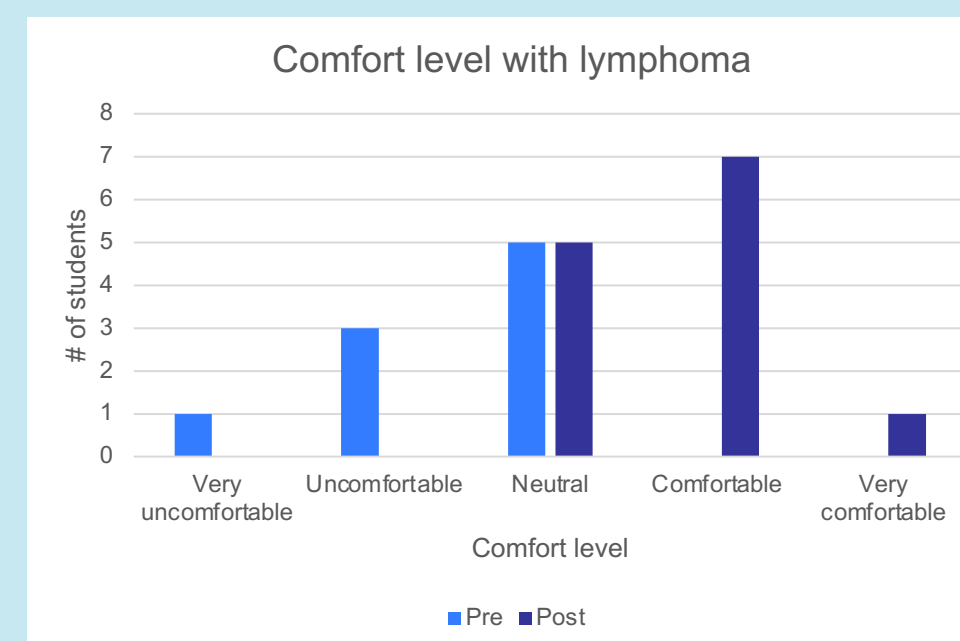


Figure 3: Comparison of pre- and post-lecture comfort level with lymphoma

Results Continued

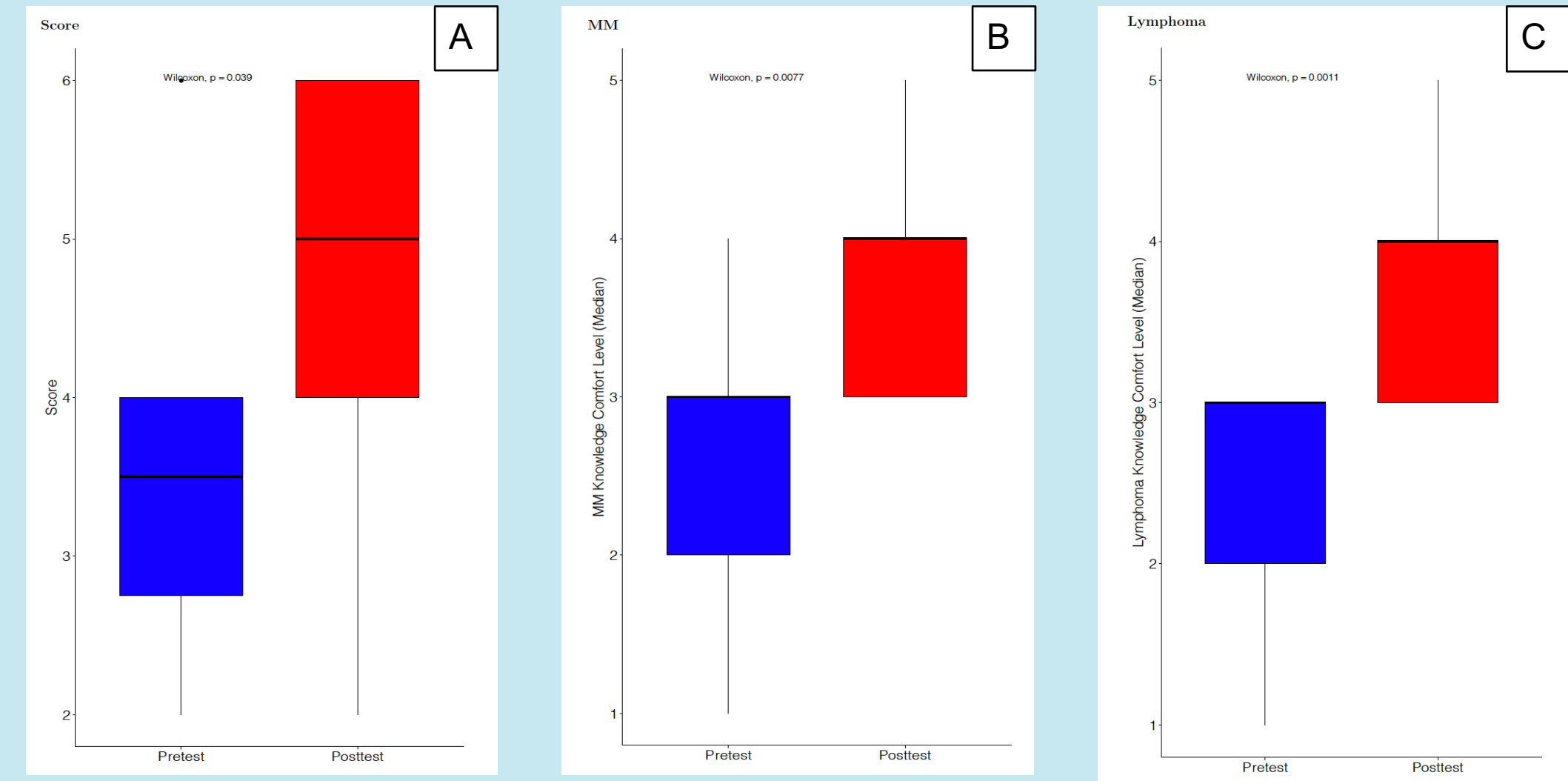


Figure 4: Wilcoxon test showing statistically significant increase in : A) knowledge level based on quiz score comparison, B) comfort level with multiple myeloma, and C) comfort level with lymphoma.

Conclusions

- Malignancies represent a major public health risk, and physicians of all subspecialties care for cancer patients and survivors. Therefore, the understanding of heme/onc conditions and treatments is valuable to physicians in training.
- Based on our results, we will make our curriculum permanent, year-round and expand the lecture series to include additional topics.
- Our curriculum will help extend formal heme/onc teaching beyond the first two years of medical school.

References

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