

Utilization of an Allergy De-Labeling Learning Module to Enhance Resident Education

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Introduction

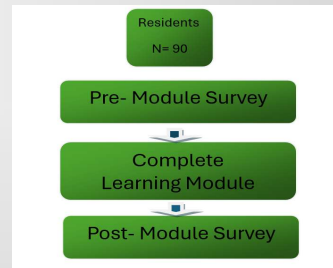
Penicillin is one of the most reported drug allergies by patients; however, most patients can tolerate its administration. Penicillin oral and skin challenges are a safe and effective way to evaluate patients with reported allergies. The PENFAST tool can be used to risk-stratify patients for further testing. Formal instruction in desensitization during residency is uncommon for this frequently encountered clinical situation, but educational resources are widely available from professional societies and organizations. In this improvement project, we assessed resident understanding of reported antibiotic allergies, and determined if a one-time teaching module could improve knowledge and comfort in managing cases.

Methods

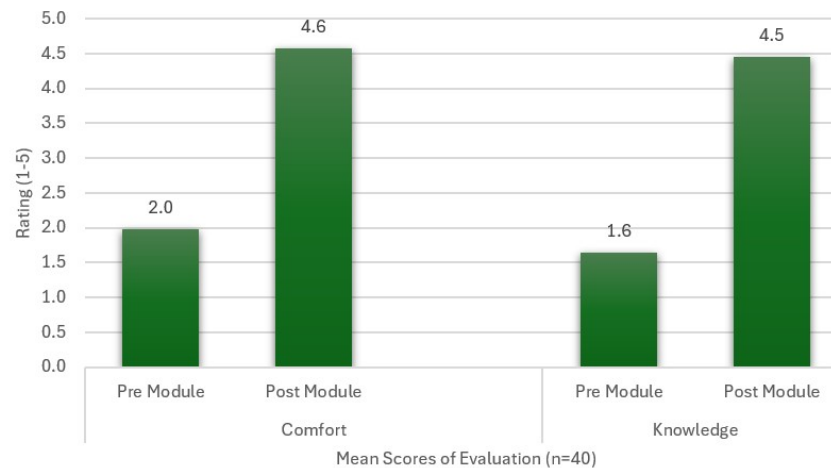
A 2-page teaching module covering antibiotic testing, patient risk stratification, and using the PENFAST scale was developed using the Penicillin Allergy Education Resource from the American Academy of Allergy, Asthma, and Immunology (AAAI). This module was distributed to 94 internal medicine residents in an urban teaching hospital over email. Pre and post reading surveys asked residents to rank their understanding of penicillin allergy testing and comfortability risk-stratifying and appropriately testing patients on a five-point Likert Scale. To promote completion of the survey, a reminder was given at regular intervals. Survey responses were tallied in Microsoft Excel, and paired t-tests were calculated using Excel Toolpak with a p-value of 0.05.

Results

Of the 94 surveys distributed, a total of 40 (53%) were completed. Prior to reading the handout, residents reported an average of 1.9 / 5 in their ability to risk-stratify patients with reported penicillin allergies and referring for appropriate testing and endorsed an average of 1.6 their knowledge of the penicillin oral challenge and penicillin skin testing procedures. After reading the handout, residents rated their risk-stratification abilities as 4.5 (p<.01) and knowledge as 4.3 (p<.01).



Pre and Post Learning Allergy Module Evaluations



Limitations

While comprehensive, our project was subject to limitations of survey-based studies, including an incomplete response rate and subjective ratings. Due to the anonymous nature of the survey, we were unable to stratify responses based on the respondents' year of training.

Discussion & Conclusion

Improved education regarding penicillin allergy risk stratification and testing is needed for resident education. Our study showed that even short teaching modules, if designed using robust evidence-based sources, can significantly improve residents' understanding of and confidence in managing patients with reported allergies. The informal nature allows residents to pursue this on their own timelines and in their own environments.

References

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