

# APPROPRIATE ANTIBIOTIC PRESCRIBING MODULE - HOW TO CHOOSE WHICH DRUG TO USE

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## ABSTRACT: Poster (3C)

**Purpose:** Antibiotics are a medication class which can be challenging for undergraduate healthcare students to learn. Topics such as microbiology and pharmacology must be learned, in addition to the diagnostic component of infectious disease content. This can be overwhelming for learners when seeing this information for the first time. A learning need was identified by medical students at Memorial University of Newfoundland (MUN) for supplemental antibiotic material to complement the didactic lectures provided during pre-clerkship training. The purpose of this project was to create a module to meet this learning need.

**Methods:** In collaboration with an infectious disease specialist, a module was created to assist pre-clerkship medical student learning regarding major antibiotic classes. Learning objectives were developed to guide student learning. The module was designed to optimize recall of information through the use of mnemonics, questions, cases, and a historical description of antibiotic design as it pertains to spectrum of activity. A post-module evaluation was then conducted to determine the subjective opinion of twenty-five pre-clerkship medical students at MUN. Eight questions used a 1-5 Likert scale and two questions assessed student opinion on module strengths and areas for improvement.

**Results:** Response to eight quantitative questions ranged from 4.3 to 4.6, with "amount of detail" scoring lowest and "recommending module to others" scoring highest. Areas for improvement included adding more cases to provide a broader range of difficulty and providing more information on certain antibiotic classes. Strengths included mnemonics, simplified SOA for antibiotic classes, and review questions and cases.

**Conclusion:** The module received positive feedback and evaluation results were used to make changes to improve the module for future students. Additions include more clinical cases to cover a broader range of infections, more information on certain antibiotics, and appendices to help summarize module topics. The module is available to undergraduate medical students online through desire2learn, with the goal of publishing the module in Association of American Medical Colleges MedEd Portal. There is potential for this module to be used by several other healthcare disciplines, including pharmacy and nursing.