Antifungal Stewardship: The Clinician’s Perspective on Barriers to Implementation

Background
The presence of invasive fungal infections (IFIs) significantly increases morbidity and mortality for patients. Despite local databases having been established, antifungal stewardship (AFS) principles into clinical practice through a multidisciplinary approach can maximize the efficient use of antifungals and improve patient outcomes by directing appropriate patients to receive timely antifungal therapy. Additionally, stewardship interventions and guidance can favorably impact hospital and pharmacy costs associated with antifungal overuse.

Objectives and Methods
A survey was developed to characterize clinician perspectives on the value, approach, and robustness of AFS strategies and programs in their hospitals. Additionally, survey respondents were asked to specify barriers to implementing an AFS program at their institution.

Results
Responses were received from 267 pharmacists and physicians. The number of respondents for individual questions varied. The majority of the respondents (73%) were pharmacists and 27% were physicians. Figure 1 shows the areas of practice of the survey respondents. On a 7-point scale, with 1 representing “Strongly Disagree” and 7 representing “Strongly Agree,” survey participants were asked to indicate their level of agreement with the following statements related to AFS at their institution:

- My institution has a robust AFS program in place
- My institution’s antimicrobial stewardship program, can help with assessing and improving the institution’s antimicrobial program
- AFS are limited.

Conclusions
The survey results demonstrate the existing system-level limitations for successful implementation of AFS. Multifaceted education regarding potential benefits of a robust AFS program and its impact on patient outcomes may favorably influence these limitations.

Value of AFS
Thirty-four percent (n = 107) of respondents showed strong agreement (a rating of 6 or 7 on a 7-point scale) that their institution valued the benefits of AFS.

Presence of a Robust AFS Program
Twenty-nine percent (n = 107) showed strong agreement that their institution had a robust AFS program in place, while almost twice as many respondents (44%) indicated that their institution did not have a robust program and gave ratings of less than 4.

Multidisciplinary Approach
Only 52% (n = 189) strongly agreed that their institution took a multidisciplinary approach to AFS. Conversely, 27% of respondents did not agree that their institution had a multidisciplinary approach to AFS.

Barriers to Implementation
The top 3 barriers to successful implementation of AFS were identified as: 1) Lack of awareness of need and/or benefit of AFS (35%); 2) Limited time/money/compensation for AFS efforts (31%); and 3) Lack of physician participation (27%).

Discussion
While the clinical and nonclinical benefits of antimicrobial stewardship are widely documented, data on the benefits of AFS are limited. However, there is evidence of cost saving and improved mortality/survival when elements of an AFS program are implemented.2-7 Promoting institutional buy-in is critical in developing and establishing a successful AFS program. This requires identification of stakeholders, proponents, and institutional leaders, and a coordinated effort to assemble a multidisciplinary team and build consensus among end users.2 Involving the institution’s administration and the board of directors regarding potential benefits of a robust AFS program and its impact on patient outcomes may favorably influence these limitations.

References
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