



Pharmacy Leaders. Transforming Patient Care.

APPROPRIATE ANTIBIOTIC USE AND AWARENESS

A Statewide Education Initiative to Combat Inappropriate Antibiotic Use and Spread of Infection

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Background

The founding and expansion of antibiotic development has been used to save lives and are critical tools for common and serious infections.¹ Antibiotics have proven efficacious in the inpatient and outpatient setting, and continue to be frequently prescribed. However, according to the Centers for Disease Control and Prevention, up to one-third to one-half of antibiotic use is unnecessary or inappropriate.¹ This overuse of antimicrobials has increased rates of antibiotic resistance, described as bacteria developing defense mechanisms against their targeting agent.² Subsequently, this has led to at least 2 million people infected with antibiotic-resistant bacteria each year in the United States, making it difficult to resolve these infections.¹ This increase in prescribing demonstrate the need for further prescriber and patient education on the different types of infections and how to determine if an antibiotic is appropriate. Public awareness campaigns conducted by health care professionals through community and social media have already proven to reduce antibiotic use.³

Objectives

- To advocate for the avoidance of unnecessary prescribing from health professionals
- To educate patients on the proper use of antibiotics
- To help prevent the development of antimicrobial resistance

Methods

- The Texas Student Society of Health-System Pharmacists (SSHP) chapters engaged and educated the community on appropriate antibiotic use and the spread of infection during community and school health fairs statewide
- Student societies independently created educational materials or events to successfully achieve the common goal of educating local Texas communities on antibiotic awareness
- Pharmacy students demonstrated how pharmacists are a reliable source of information in the community

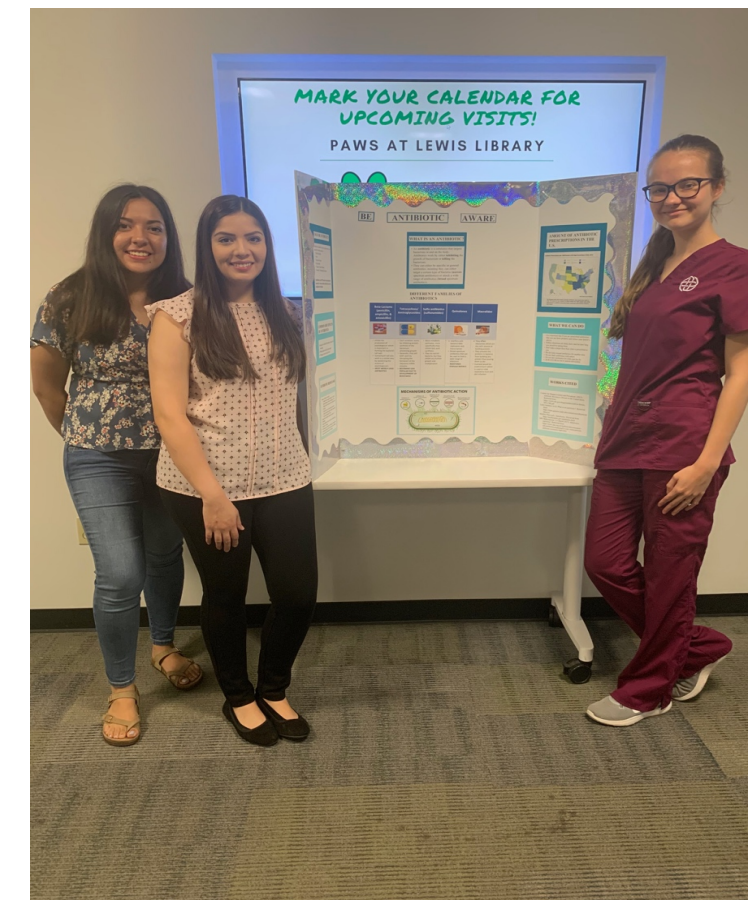
Council Members



Conclusion

Through this antibiotic awareness initiative, our goal remains to be a reliable source of information for proper medication use in Texas communities. Although our various chapters span across Texas, we hope to continue to collaborate on similar goals in future years to positively impact our local communities.

Featured Events



Interdisciplinary Education

UNTHSC SSHP members presented a poster about antimicrobial stewardship. They educated future physicians, physician assistants, pharmacists, and public health professionals about proper antibiotic prescribing practices.

University of North Texas System College of Pharmacy

BeYOUtiful Health and Hair Show

UH SSHP held a health fair at the beYOUtiful Health & Hair Show where students had the opportunity to counsel patients over antibiotic awareness and medication safety. Over 70 patients were educated on proper antibiotic usage, the impact of antibiotics on skin conditions such as skin scarring, and treatment options. The pharmacy students also educated on proper medication disposal and counseled on correct medication adherence.

University of Houston College of Pharmacy



We're F.A.B.! (Fighting Against Bacteria)

UT-Tyler's SSHP members prepared a presentation about antibiotic awareness with hygiene-related promotional items. Over 200 members of the general public were educated on how bacteria can cause infections, the proper use of antibiotics, and preventative measures against the spread of bacteria through good hand hygiene.

The University of Texas at Tyler, The Ben and Maytee Fisch College of Pharmacy

Community Health Fair

TSU SSHP participated in the Community Health Fair at New Life SDA church where students provided blood pressure testing and patient education on antibiotic awareness to members of the community. The focus was on the "do's and don'ts" of antibiotic use and the importance of medication safety.

Texas Southern University College of Pharmacy and Health Sciences



Microbiology Laboratory Tours

UT-Austin's SSHP members had the opportunity to explore and tour a microbiology lab and witness how they operate. Students were able to learn more about the research of bacteria and the study of their reproduction. This experience demonstrated another way pharmacists can be educated in bacteria and how we can help prevent antibiotic resistance.

The University of Texas at Austin College of Pharmacy

AAIMing to Make an Impact

TAMU SSHP along with its Antibiotic Awareness and Immunization (AAIM) committee hosted a booth at the Dr. James Robertson Jr. Ties and Tennis Shoes Memorial Fun run and 5K to educate the local community on the proper use and administration of antibiotics. This education on appropriate antibiotics and completing a course of antibiotics encourages the community to join the battle against antibiotic resistance.

Texas A&M University, Irma Rangel College of Pharmacy



Spreading Antibiotic Awareness at Community Screenings

Texas Tech's SSHP distributed flyers that educated patients on antibiotics and proper hand hygiene at our monthly United Weekend Wellness health screening booths in Abilene, Amarillo, Dallas, and Lubbock. Students are educating the community about when it is appropriate to take an antibiotic, how antibiotics work, the importance of completing an antibiotic course, and proper hand hygiene to prevent spreading of germs.

Texas Tech University Health Sciences Center School of Pharmacy

Monthly Meeting Engagement

UIW SSHP engaged students during the monthly meetings through antimicrobial stewardship games in which participants had to identify appropriate antimicrobial use. The goal of these mini games was to increase student awareness of correct antimicrobial stewardship, continually educate those about the consequences of antimicrobial misuse, and warn of the threat of antimicrobial resistance.

University of Incarnate Word, Feik School of Pharmacy



References

1. Centers for Disease Control and Prevention. Be antibiotic aware: smart use, best care. CDC website. Available at: <https://www.cdc.gov/features/antibioticuse/index.html>. Updated November 9, 2018. Accessed November 2, 2019.
2. Mayo Clinic Staff. Antibiotics: are you misusing them? Mayo Clinic website. Available at: <https://www.mayoclinic.org/healthy-lifestyle/consumer-health/in-depth/antibiotics/art-20045720>. Updated January 18, 2018. Accessed November 2, 2019.
3. Ashiru-Oredope D, Hopkins S. Antimicrobial resistance: moving from professional engagement to public action. *J Antimicrob Chemother*. 2015 Nov;70(11):2927-30. doi: 10.1093/jac/dkv297.