

C. Education

	Total (n=96)	Hospital with IDS (n=74)	Hospital without IDS (n=10)	P ^a
Documented guidelines for antibiotic use (%)				
For community-acquired infectious diseases	11 (13.1)	11 (14.9)	0 (0)	0.345
For surgical prophylactic antibiotics	36 (42.9)	35 (47.3)	1 (10.0)	0.038
For designated antibiotics included in restrictive measures	25 (29.8)	23 (31.1)	2 (20.0)	0.716
Guidelines for antibiotic use reflect antimicrobial susceptibility results in the hospital (%)	11 (13.1)	11 (14.9)	0 (0)	0.345
Education programs about proper antibiotic use (%)				
For physicians, specialists	65 (77.4)	62 (83.8)	3 (30.0)	0.001
For physicians, internship or residents	34 (40.5)	33 (44.6)	1 (10.0)	0.044
For other medical staffs	58 (69.0)	56 (75.7)	2 (20.0)	0.001
For patients and caretaker	23 (27.4)	22 (29.7)	1 (10.0)	0.272
Requester of education programs about proper antibiotic use (%)				
Hospital administration	2 (2.4)	1 (1.4)	1 (10.0)	0.225
Medical departments in need	38 (45.2)	36 (48.6)	2 (20.0)	0.104
Carrying out voluntarily by medical staffs conducting ASPs	33 (39.3)	33 (44.6)	0 (0)	0.005
Issuing newsletters about antimicrobial stewardship (%)	1 (1.2)	1 (1.4)	0 (0)	1.000

Abbreviations: IDS, infectious diseases specialist; ASP, antimicrobial stewardship programs

^a comparison between hospital with IDS and hospital without IDS

Disclosures. All authors: No reported disclosures.

2027. What Are the Views Among Pakistani Physicians Toward Antimicrobial Resistance and Hospital Antimicrobial Stewardship Programs? A Multi-Site Qualitative Study

Khezhar Hayat, MPhil¹; Meagen Rosenthal, PhD²; Ali Hassan Gillani, Master¹; Panpan Zhai, Master³; Wenjing Ji, Master¹; Jie Chang, PhD¹; Hao Hu, PhD⁴; Yu Fang, PhD⁵; ¹Xian Jiatong University, Xian, Shaanxi, China (People's Republic); ²Department of Pharmacy Administration, School of Pharmacy, University of Mississippi, Mississippi, Mississippi; ³Xian Jiaotong University, Xi'an, Shaanxi, China (People's Republic); ⁴University of Macau, Macao, Macau; ⁵School of Pharmacy, Xi'an Jiaotong University, Xian, Shanxi, China (People's Republic)

Session: 236. Antibiotic Stewardship: Global

Saturday, October 5, 2019: 12:15 PM

Background. Antimicrobial resistance (AMR) is a major public health issue that the world is facing in the 21st century and implementation of antimicrobial stewardship program (ASP) is one of the recognized approaches to combat AMR. Little is known on the views among Pakistani physicians regarding AMR and the benefits of hospital ASP implementation. This study was aimed to investigate the perception and attitude of physicians about AMR and ASP.

Methods. Qualitative face-to-face and telephonic interviews were conducted by using purposive sampling method with 22 physicians working in seven tertiary care public hospitals of Punjab, Pakistan. All interviews were audio-recorded and transcribed verbatim. Qualitative software was used, and a thematic analysis conducted.

Results. Three major themes were identified: (1) the growing concern of AMR in Pakistan, (2) the role(s) of healthcare professionals in antibiotic prescribing and infection control, and (3) managing antibiotic resistance in hospitals. Poor healthcare facilities, insufficient trained medical staff, and inadequate resources were the key barriers in the implementation of ASP in Pakistan.

Conclusion. Physicians of public sector tertiary care teaching hospitals have shown poor familiarity toward hospital ASPs but the concept of hospital ASPs in Pakistan can be established by using the distinct themes that originated during this study. Overall, the attitude of physicians was positive toward its enforcement in all types of hospital settings including teaching hospitals.

Disclosures. All authors: No reported disclosures.

2028. A Survey of Antimicrobial Availability, Training, and Antimicrobial Recommendations by Staff in Pharmacies and Non-pharmacy Stores in the Dominican Republic

Alfredo J. Mena Lora, MD¹; Marcos Almonte, MD²; Mariel Jimenez, MD²; Julia Rodriguez Abreu, MD, MPH³; Rita Rojas Fermin, MD³; Susan C. Bleasdale, MD¹; ¹University of Illinois at Chicago, Chicago, Illinois; ²Universidad Iberoamericana, Santo Domingo, Distrito Nacional, Dominican Republic; ³CEDIMAT, Santo Domingo, Distrito Nacional, Dominican Republic; ⁴Hospital General Plaza de la Salud, Santo Domingo, Distrito Nacional, Dominican Republic

Session: 236. Antibiotic Stewardship: Global

Saturday, October 5, 2019: 12:15 PM

Background. Antimicrobial resistance (AMR) is a rising global health challenge. Antimicrobial use (AU) is a key factor in the development of AMR, but knowledge gaps remain on AU and dispensation in low- and middle-income countries (LMICs). AU can be purchased without prescriptions in many LMICs and are available in pharmacies and non-pharmacy stores. We seek to describe the availability, training and AU recommendations in pharmacies and non-pharmacy stores in the Dominican Republic (DR).

Methods. We conducted a survey of pharmacies and non-pharmacy stores that dispense antimicrobials from March to April 2019 in randomly selected locations throughout metropolitan Santo Domingo. Data on the availability of antimicrobials and training on AU was obtained. Antimicrobial of choice for common symptoms such as dysuria, throat pain, diarrhea, fever, and cough were queried, and data tabulated. Availability of antimicrobials by phone and online delivery was assessed.

Results. A total of 35 stores were surveyed. Ten pharmacies and 15 nonpharmacy stores agreed to participate. Ten refused and were excluded. Fifty AU recommendations were given in pharmacies and 16 in non-pharmacy stores. The most common type of antimicrobial recommended were aminopenicillins (Figure 1). Staff received prior training on antimicrobials in 70% of pharmacies and 0% of non-pharmacy stores. Antimicrobial recommendations by symptom in pharmacies and non-pharmacy stores are seen in Figure 2 and 3. Antimicrobials are available for phone delivery in 100% of pharmacies and 90% of non-pharmacy stores. No antimicrobials were available via online delivery apps.

Conclusion. Antimicrobials are widely available in the DR without prescriptions and can be purchased in person or via phone delivery. Aminopenicillins are commonly prescribed and may contribute to high rates of ESBL in the DR. Pharmacy staff gave more specific symptom-based recommendations than non-pharmacy staff and commonly had prior training on antibiotic use. In LMICs with easy access to antimicrobials, frontline staff in pharmacies and non-pharmacy stores are gatekeepers for AU and may benefit from further education and training. Further studies on attitudes and perceptions related to antimicrobial use in the community are needed.

Figure 1. Total number of recommendations by antimicrobial in pharmacies and non-pharmacy stores

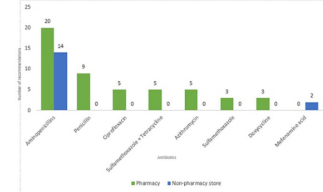


Figure 2. Antimicrobial recommendations by symptom in non-pharmacy stores

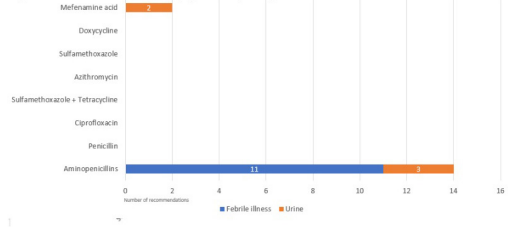
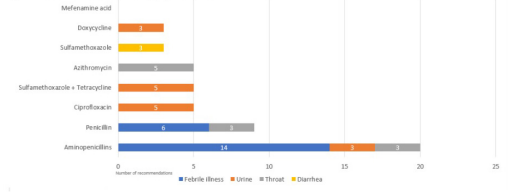


Figure 3. Antimicrobial recommendations by symptom in pharmacies



Disclosures. All authors: No reported disclosures.

2029. Prevalence of Antibiotic Use and Administration among Hospitalized Adult Patients at a Tertiary Care Hospital in Kilimanjaro, Tanzania

Furaha Lyamuya, MD¹; Florida Muro, MD, PhD²; Tianchen Sheng, MSc³; Rose Mallya¹; Tabitha S. Uronu¹; Rehema M. Minde¹; Deverick J. Anderson, MD, MPH⁴; Chris W. Woods, MD⁵; Blandina T. Mmbaga, MD, Mmed, PhD⁶; L. Gayani Tillekeratne, MD, MSc⁷; ¹Kilimanjaro Christian Medical Centre, Moshi, Kilimanjaro, Tanzania; ²Institute of Public Health (IPH), Moshi, Kilimanjaro, Tanzania; ³Duke University Medical Center, Durham, North Carolina; ⁴Duke Center for Antimicrobial Stewardship and Infection Prevention, Durham, North Carolina; ⁵Duke University School of Medicine, Durham, North Carolina; ⁶Kilimanjaro Clinical Research Institute - Kilimanjaro Christian Medical Centre, Moshi, Kilimanjaro, Tanzania; ⁷Duke University, Durham, North Carolina

Session: 236. Antibiotic Stewardship: Global

Saturday, October 5, 2019: 12:15 PM

Background. Antimicrobial stewardship programs (ASPs) have been shown to improve the appropriate use of antimicrobials, especially in high-income countries. However, ASPs are relatively less well implemented in low-or-middle income countries. To improve the effectiveness of ASPs in these settings, it is important to determine the core actions and targets for improving antimicrobial use. We sought to describe the prevalence and patterns of antibiotic use at a tertiary care hospital in Tanzania.

Methods. Consecutive patients admitted to an adult medical ward at a tertiary care hospital, Kilimanjaro Christian Medical Centre, in Moshi, Tanzania were enrolled from June 2018 to March 2019. The medical record was reviewed for data regarding the type of antibiotics prescribed, indications for use, and microbiologic testing ordered.

Results. A total of 1103 patients were enrolled during the study period. The majority of patients were males (663, 60.1%), with the median age being 54 years (IQR 39–70). About one-third (390, 35.4%) of the admitted patients received antimicrobials during hospitalization, with pneumonia being the leading indication for antimicrobial use (158, 40.5%). The most commonly used antibiotics included ceftriaxone in 285 (73.1%), metronidazole in 155 (39.7%), and amoxicillin/ ampicillin in 46 (11.8%) patients. The median duration of antimicrobial use was 5 days (IQR 3–7). Few patients on antimicrobials (27, 6.9%) had culture results, of which half (15, 55.6%) were positive for an organism and a minority (8, 29.6%) were susceptible to the antibiotics being used. Overall, mortality in the cohort was 22.7% and the median duration of hospitalization was 5 days (IQR 3–8).

Conclusion. Antibiotics were used in a substantial proportion of admitted patients. However, in most cases, treatment was empirical with limited use of culture results. Future ASP efforts can target the improved use of microbiologic cultures to target antimicrobial use.

Disclosures. All authors: No reported disclosures.