Your role in antimicrobial stewardship (AMS)

Everyone can be involved in AMS and help reduce antimicrobial resistance (AMR)

Physicians¹

- Order appropriate and mandatory laboratory tests before prescribing antibiotics²
- Review prescribed antibiotics at 48 hours³
 - Will the infection respond to treatment?
 - Is the patient receiving the correct antibiotic, dose and route of administration?
 - How long should treatment last?
 - Are there available data to guide continuation of empirical therapy or targeted antimicrobial agents?
 - Can a more targeted drug be used?
- Create prescribing guidelines and clinical pathways⁴
- Train other staff about AMS⁴

Pharmacists¹

- Preauthorize certain antibiotics^{4,5}
- Audit, review and feedback⁴
- Identify opportunities for optimized dosing,

Clinical microbiologists¹



- Provide precise and timely reports of culture, serological and rapid testing results
- Prepare and support publication of antimicrobial susceptibility reports⁴
- Create local antibiogram to guide empiric therapy⁴
- Provide surveillance data on resistant organisms⁴

Infection prevention control officer¹

- Monitor and prevent healthcare-associated infections³
- Advocate infection control concepts and procedures, including AMS, to all healthcare workers

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- de-escalation and IV-to-oral conversion^{4,5}
- Ensure only drugs with a prescription are dispensed
- Train other staff about AMS^{4,5}

Hospital administrators

• Provide resources and policy support⁴

Nurses

- Encourage responsible use of antimicrobials^{6,7}
- Monitor adverse events⁶⁻⁸
- Infection prevention and control measures^{6,8}
- Educate new ward staff and patients about AMR and the importance of hygiene^{6,7}

Patients

- Be educated about AMR and how to take antibiotics correctly⁹
- Adhere to proper hand washing and other hygiene measures⁹

References

- 1. Society for Healthcare Epidemiology of America, Infectious Diseases Society of America, Pediatric Infectious Diseases Society. Policy statement on antimicrobial stewardship by the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), and the Pediatric Infectious Diseases Society (PIDS). Infect Control Hosp Epidemiol 2012;33:322-327.
- 2. Leekha S, et al. General principles of antimicrobial therapy. Mayo Clin Proc 2011;86:156-167.
- 3. Centers for Disease Control and Prevention. Core elements of hospital antibiotic stewardship programs. Available at: www.cdc.gov/antibiotic-use/healthcare/implementation/core-elements.html. Accessed December 2017.
- 4. Dellit HT, et al. Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America guidelines for developing an institutional program to enhance antimicrobial stewardship. Clin Infect Dis 2007;44:159-177.
- 5. American Society of Health-System Pharmacists. ASHP statement on the pharmacist's role in antimicrobial stewardship and infection prevention and control. Am J Health-Syst Pharm 2010;67:575-577.
- 6. Alividza V. Reducing drug resistance through antimicrobial stewardship strategies. Nursing Times [online] 2017;113:22-25.
- 7. American Nurses Association (ANA) Centers for Disease Control and Prevention (CDC). Redefining the antibiotic stewardship team: Recommendations from the American Nurses Association/Centers for Disease Control and Prevention Workgroup on the role of registered nurses inhospital antibiotic stewardship practices. 2017. Available at: www.cdc.gov/antibiotic-use/healthcare/pdfs/ANA-CDC-whitepaper.pdf. Accessed December 2017.
- 8. Olans RN, et al. The critical role of the staff nurse in antimicrobial stewardship unrecognized, but already there. Clin Infect Dis 2016;62:84-89.
- 9. World Antibiotic Awareness Week. 2016 Campaign Toolkit. Available at: www.who.int/campaigns/world-antibiotic-awareness-week/Toolkit2016.pdf?ua=1. Accessed December 2017.



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