ANTIMICROBIAL STEWARDSHIP & THE NURSE PRACTITIONER

Pamela Brown Stewart, DNP, APRN, FNP-BC

30th Annual Texas Nurse Practitioner Conference

Dallas, Texas
Antibiotics have been referred to as the most significant therapeutic intervention in the history of medicine.1

- 269 million antibiotic prescriptions dispensed from U.S. outpatient pharmacies in 20152
- 838 antibiotic prescriptions per 1,000 persons
- Enough for 5 out of every 6 people to have one antibiotic prescription/year
- At least 30% were unnecessary (80.7 million)
- 31.5 million Fluoroquinolone (FQ) courses dispensed outpatient in U.S.3
  - 5% were for conditions that did not require antibiotics
  - 19.9% for conditions where FQ are not recommended first line therapy
Stewardship is an __________ that embodies the responsible planning and management of resources.  

_____________________________refers to coordinated interventions designed to improve and measure the use of antimicrobials by promoting the selection of the optimal drug regimen, dose, and duration of therapy and route of administration.  

Antimicrobial __________________ seek to achieve optimal clinical outcomes related to antimicrobial use to:

- Minimize toxicity and other adverse drug effects
- Reduce the cost of healthcare for infections
- Limit the selection for antimicrobial resistant strains.  

### Top Ten Patient Reasons for Requesting Antibiotics

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

### Reasons Clinicians Prescribe Antimicrobials When Not Required

H  
E  
L  
P
Tip #1: Have patient education materials accessible.

Tip #2: Know the “red flags” for the presenting problem.

- **Pharyngitis** – Excessive drooling, unilateral facial swelling, persistent greater than 6 weeks, airway compromise, unable to open jaw

- **Conjunctivitis** – severe eye pain, visual changes, immunocompromised

- **Cellulitis** – Fever, rapidly spreading redness, crepitus, pain disproportionate to wound/injury, recent wading in the Gulf of Mexico, necrosis

Tip #3: Know the relevant statistics.

**Sinusitis**

- Antibiotics are prescribed far too often for sinus infections: only 2 to 10 percent are caused by bacteria, requiring treatment with antibiotics, suggest new guidelines released by the Infectious Diseases Society of America (IDSA).

- Nearly one in seven people suffer from sinus infections every year, but 90 to 98 percent are caused by viruses.

- The guidelines help doctors distinguish between viral and bacterial infections so they know when to prescribe antibiotics.

- Amoxicillin-clavulanate should be prescribed for bacterial sinus infections, due to increasing resistance against amoxicillin.
## Tip #4: Develop your Talking Barbie responses

<table>
<thead>
<tr>
<th>PATIENT SAYS</th>
<th>NP RESPONSE</th>
<th>AVOID SAYING</th>
</tr>
</thead>
<tbody>
<tr>
<td>The color of the stuff coming out my nose is green and my mother taught me...</td>
<td>“Let me show you some information I have about what the color of drainage means.”</td>
<td>Treatment is not made on the color of nasal drainage.</td>
</tr>
<tr>
<td>My husband has bronchitis and I don’t want to catch…</td>
<td>“Unfortunately, antibiotics have not been shown to prevent upper respiratory infections.”</td>
<td>Using an antibiotic for a virus is like offering a fire extinguisher to someone who is drowning.</td>
</tr>
<tr>
<td>I am going on a cruise…</td>
<td>“You need and deserve the correct treatment. If I give you an antibiotic for a viral illness there are chances you could develop more problem from the drug’s potential side effects.”</td>
<td>The potential side effects of antibiotic increase your risk of dying from a cardiac arrhythmia threefold.</td>
</tr>
<tr>
<td>Special life event</td>
<td>“Viral infections can make you feel sick and uncomfortable. Unfortunately antibiotics won’t help you and could actually do harm”</td>
<td></td>
</tr>
<tr>
<td>Short-term Stress</td>
<td>“I understand your situation and your desire for a quick end to your illness but taking an antibiotic I am not going to help.”</td>
<td>I am not a social worker.</td>
</tr>
<tr>
<td>Long-term stress</td>
<td>“It sounds like you are feelin stressed. Would you like to talk about what is going on?”</td>
<td>I am not a psychiatrist.</td>
</tr>
<tr>
<td>Good Old Days</td>
<td>“You are right, in the past antibiotics were prescribed for symptom like yours. Science tells us it not he right thing to do.”</td>
<td>Things change and you just have to get used to it.</td>
</tr>
<tr>
<td>You aren’t even a real doctor. I need to see a real physician!</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# How NPs Can Be Antimicrobial Stewards

<table>
<thead>
<tr>
<th><img src="image1.jpg" alt="Map of Portugal" /></th>
<th><img src="image2.jpg" alt="Image of children with American flag" /></th>
<th><img src="image3.jpg" alt="Official Policy" /></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4.jpg" alt="Checkmark" /></td>
<td><img src="image5.jpg" alt="No sign" /></td>
<td><img src="image6.jpg" alt="Person holding sign" /></td>
</tr>
</tbody>
</table>

---

Great Ideas:

- ______________
- ______________
- ______________
- ______________
RESOURCES AND REFERENCES


4. Centers for Disease Control and Prevention (2013) *Antibiotic resistance threats to United States*  
   Centers for Disease Control and Prevention (2018) *Antibiotic/Antimicrobial Resistance*  


