





۲۵ - ۲۸ اردیبهشت ۱٤۰۳ - فارس - شیراز



Antibiotics

Abdolvahab Alborzi

Professor of Pediatric Infectious Disease Department of Pediatrics





• Antibiotic resistance factors





Antibiotic resistance factors

- Overuse and misuse of antibiotics are the primary risk factors for antibiotics resistance.
- Inadequate professional competence among primary care physicians may worsen the issue.
- Enhancing primary care physicians understanding and application of appropriate antibiotic usage can decreased antibiotic resistance.
- This risk is not only for the individual taking the antibiotic, but there is also a risk of spread of resistant bacteria to close personal contacts



•

Causes of Inappropriate antibiotics uses







Causes of Inappropriate antibiotics uses

- Inappropriate use was further categorized into four groups:
 - 1. unnecessary use
 - 2. Incorrect spectrum of antibiotic
 - 3. Overuse of extended spectrum antibiotics
 - 4. Combined use of antibiotics



Distribution of antibiotic prescriptions stratified by antibiotic group and appropriateness of use.

Antibiotic group	Total	Appropriate use,	Inappropriate use, n (%)		
	n(%)	n(%)	Escalated use of	Incorrect	Unnecessary
			extended spectrum	spectrum	use
Penicillins	38,462	5,981 (15.6)	0 (0)	0 (0)	32,481 (84.4)
	(51.5)				
Cephalosporins	10,757	0 (0)	1,641 (15.3)	0 (0)	9,116 (84.7)
	(14.4)				
Macrolides	10,574	355 (3.4)	0 (0)	1,318 (12.5)	8,901 (84.2)
	(14.2)				
Quinolones	4,693	0 (0)	0 (0)	2,168 (46.2)	2,525 (53.8)
	(6.3)				
Lincosamides	4,732	0 (0)	0 (0)	0 (0)	4,732 (100)
	(6.3)				
Nitroimidazoles	3,687	288 (7.8)	0 (0)	0 (0)	3,399 (92.2)
	(4.9)				
Aminoglycosides	1,743	0 (0)	0 (0)	198 (11.4)	1,545 (88.6)
	(2.3)				
Total	74,648	6,297 (8.4)	1,641 (2.2)	3,684 (4.9)	63,026 (84.5)





Who Are Responsible for Misused antibiotics?





Who Are Responsible for Misused antibiotics?

- 1. Physician
- 2. Patients
- 3. Family
- 4. pharmacist





۲۵ - ۲۸ اردیبهشت ۱٤۰۳ فارس - شیراز

Presentation of Viral Infections in Children



Presentation of Viral Infections in Children

- 100% of colds.
- 95% of new coughs
- 95% of fevers
- 80% of sore throats
- 90% of pneumonia.
- 99% of diarrhea and vomiting
- Note: There are a few anti-viral drugs that can treat viral infections.
 An example is Tamiflu used for severe influenza.





• The ways of better feeling without antibiotics



Pediatric Congress Professor Amirhakimi 14-17 May 2024-Fars-Shiraz



The ways of better feeling without antibiotics

Ask your doctor or pharmacist about ways to feel better if an antibiotic isn't needed





How we can Measuring Outpatient Antibiotic Prescribing?





How we can Measuring Outpatient Antibiotic Prescribing?

 Quality measures for outpatient antibiotic prescribing can be used by clinicians, healthcare systems, health plans, and public health to determine if antibiotic prescribing patterns meet appropriateness standards.





Show Few Antibiograms Of Shiraz Bacteria



Pediatric Congress Professor Amirhakimi



Susceptibility Pattern of 35 Acinetobacter sp. Isolated From Blood Culture, Nemazi Hospital. 2023







Susceptibility Pattern of 109 Klebsiella sp. Isolated From Blood Culture, Nemazi Hospital. 2023







Colistin Resistance Klebsiella sp. isolated from Blood Culture In Nemazi Hospital 2018-2023

- 55 blood isolate were colistin resistance klebsiella sp.
- All MDR
- 25 isolated were XDR
- 14 isolated were PDR (all died)
- Mortality rate were 64%





Susceptibility Pattern of 76 Pseudomonas sp. Isolated From Blood Culture, Nemazi Hospital. 2023







Susceptibility Pattern of 79 Staphylococcus aureus Isolated From Blood Culture, Nemazi Hospital. 2023







Susceptibility Pattern of 44 Enterococcus sp. Isolated From Blood Culture, Nemazi Hospital. 2023

susceptiblility of Enterococcus spp. in 2023

