



Overuse and Misuse of Antibiotics

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ABSTRACT:

The overuse of antibiotics — especially taking antibiotics even when they're not the appropriate treatment — promotes antibiotic resistance.

According to the Centers for Disease Control and Prevention, up to one-third to one-half of antibiotic use in humans is unnecessary or inappropriate.

Keywords: WHO, MDR

Introduction

Antibiotic overprescribing is a particular problem in primary care, where viruses cause most infections. About 90% of all antibiotic prescriptions are issued by general practitioners, and respiratory tract infections are the leading reason for prescribing. Multifaceted interventions to reduce overuse of antibiotics have been found to be effective and better than single initiatives. Interventions should encompass the enforcement of the policy of prohibiting the over-the-counter sale of antibiotics, the use of antimicrobial stewardship programmes, the active participation of clinicians in audits, the utilization of valid rapid point-of-care tests, the promotion of delayed antibiotic prescribing strategies, the enhancement of communication skills with patients with the aid of information brochures and the performance of more pragmatic studies in primary care with outcomes that are of clinicians' interest, such as complications and clinical outcomes.

Many people come in with what they think requires an antibiotic and they don't want to

settle for less than that," he said. "They need to be convinced that it's not appropriate."

Antibiotics are frequently viewed as a "magic bullet," even in cases of viral infection where an antibiotic will have no effect.

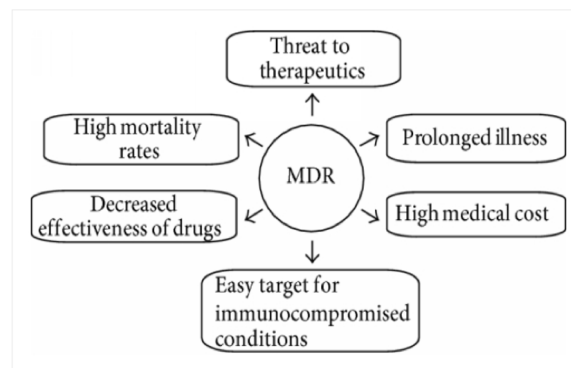
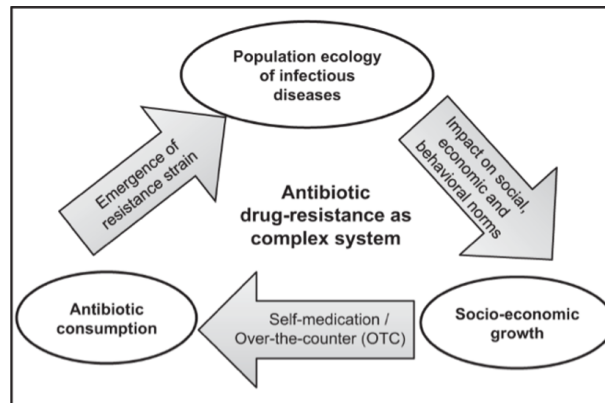
Nearly 25 percent of antibiotic prescriptions are unnecessary

The WHO calls antibiotic resistance — which is the process through which bacteria become resistant or immune to antibiotics — "one of the biggest threats to global health, food security, and development today."

Instances of antibiotic resistant superbugs including pneumonia, tuberculosis, gonorrhoea, and salmonellosis have already been documented. Antibiotic overuse is widespread and rampant. Antibiotic overuse is a major driver of antibiotic resistance. It's up to doctors to stop prescribing antibiotics unnecessarily, for the sake of patients and society in general.

Antibiotics only work to treat infections caused by bacteria. Using them for viruses will NOT make you feel better or get back to work faster.

- The common cold, flu, most sore throats, bronchitis and many sinus and ear infections are caused by viruses. Antibiotics do not help fight viruses.
- The majority of common respiratory infections are not helped by antibiotics, because they are caused by a virus.
- Yellow or green mucus does not indicate a bacterial infection.
- If your health care provider determines your illness is being caused by a virus, ask him or her for tips on how to relieve symptoms and feel better.



MDR - multi drug resistance Side effects of antibiotics

- Antibiotics Increase Fatal Diarrhea Cases in Children. ...
- Antibiotics Can Upset Sensitive Gut Flora. ...
This can lead to other infections such as Clostridium difficile and other antibiotic-associated diarrhea.
- Antibiotics Help Teach Good Bacteria to Go Bad. ...
- Antibiotics Are Increasing Cases of Untreatable Skin disease ...

- Antibiotics Are Helping Drive Up Drug and Hospital Costs.
 - Taking antibiotics can increase the risk of getting an antibiotic-resistant infection later.
 - Antibiotics cause 1 out of 5 emergency department visits for adverse drug events. Antibiotics are also the most common cause of emergency department visits for adverse drug events in children under 18 years of age
- Study and awareness program was done on 600 employees and beneficiaries and 38 doctors to know their awareness on misuse and over use of antibiotics by IMS Department (ESI Telangana) JD Hyderabad Medical IMS department Questionnaire to patients

Table 1:

	No of patients
Using of antibiotics by employees and beneficiaries	
Cold or flu	576
Cough and bronchitis	302
Sore throat	598
Runny nose	457
Congestion	245
During pregnancy	127
During lactation	109
For children under the age of 8 years	179
If a family member is allergic to an antibiotic	112
As prophylaxis to protect from contacting infections	287
Taking left over	289
Taking them for cough, cold and flu	346
Use of the same antibiotic whenever you have fever	344
Not completing the whole course of antibiotics	209
For children under the age of 8 years	179
If a family member is allergic to an antibiotic	112
As prophylaxis to protect from contacting infections	287
Taking left over	289
Taking them for cough, cold and flu	346
Use of the same antibiotic whenever you have fever	344
Not completing the whole course of antibiotics	209

Table 2: Questionnaire to doctors

1. Do you feel overdose of prescription of antibiotics can lead to resistance?	Yes 32	No 6
2. Do you keep yourself updated by Reading any latest scientific material prior to the use of antibiotics	Yes 28	No 10
3. Does your antibiotics prescription depend on patients preference	Yes 8	No 30
4. Are your prescriptions influenced by advertisements ?	Yes 26	No 12
5. Do you prescribe because patients want the drug?	Yes 22	No 16
6. Do you have a fear of loss of patients, when you don't prescribe antibiotics?	Yes 21	No 17
7. Do you fear the spread of an infection just because you have not prescribed antibiotics?	Yes 9	No 29
8. Do you take medical history of consumption of antibiotics before prescribing antibiotics	Yes 33	No 5
9. Do you prescribe antibiotics depending on its cost?	Yes 34	No 4
10. Do you write the drug brand/ market name or the content name in the prescription?	Brand 32	Both (brand and content) 6
11. Do you feel antibiotic prescription is absolutely necessary to manage diseases?	Yes 32	No 5
12. Does self medication with antibiotics by patients to treat problems may be responsible for antibiotic resistance	Yes 34	No 4

To stop use of antibiotics Educational Awareness Programs is very important Educational Awareness Programs

Interactive educational interventions are the most effective. These are non- compulsory interventions based on real prescriptions in clinical practice and include educational outreach visits, audits and counseling interviews with feedback and multifaceted interventions

How to take antibiotics safely:

- Take them exactly as your provider has prescribed.
- Do not skip doses.
- Do not share with others or take from others.
- Finish the prescription even if you start to feel better.
- Do not save antibiotics for later.
- Take probiotics to help the body maintain its good bacteria.

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