Responsible Use of Antibiotics Saves Lives

54th National Pharmacy Week (NPW) - 2015
15th to 21st November, 2015
Indian Pharmaceutical Association
Antimicrobial resistance is a cause of serious concern across the world, and more so in India.

Unnecessary and improper use of antibiotics causes the bacteria to develop resistance towards antibiotics.

Resistance makes the antibiotics ineffective.

It is possible to prevent development of resistance by using antibiotics responsibly.
WHAT ARE ANTIBIOTICS?
Antibiotics are prescription medicines, used to treat or prevent infections caused by bacteria. Antibiotics do not work against viruses.

WHEN TO USE ANTIBIOTICS?
Doctors will prescribe antibiotics when needed. The type, dose and duration will depend on the type and severity of the infection and the individual’s condition, weight and age.
BEFORE TAKING ANTIBIOTICS:
Inform your doctor or pharmacist if:

- You are allergic to some medicines
- You have liver or kidney problems
- You are pregnant or breastfeeding

HOW TO USE ANTIBIOTICS RESPONSIBLY?
Antibiotics are prescription only medicines and to be used only on advice of a doctor.
Take them as advised by your doctor or pharmacist by maintaining the dose, time and duration.
Complete the full course even if you feel better after few days of treatment.
Do not use them for viral infections like common cold, flu and sore throat.
Take antibiotics as advised by your doctor or pharmacist or other health worker.

Be a partner in the noble cause of preventing development of antibiotic resistance.

Tell your doctor or pharmacist if you are pregnant or breastfeeding or allergic to any medicine or with liver/kidney problems.

Watch out for side effects and report your experience on side effects to your doctor or pharmacist.
Do not self-medicate

Do not believe that antibiotics are cure for all illnesses

Do not use expired medicines

Do not skip doses and do not stop your treatment mid-way

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Antibiotics kill bacteria, not viruses!

Do not use antibiotics for cough, cold, sore throat, diarrhea, as most of these are caused by viruses.

<table>
<thead>
<tr>
<th>Illness</th>
<th>Usual Cause</th>
<th>Antibiotic Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold/Runny Nose</td>
<td>Yes</td>
<td>NO</td>
</tr>
<tr>
<td>Bronchitis/Chest Cold (in otherwise healthy children and adults)</td>
<td>Yes</td>
<td>NO</td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Flu</td>
<td>Yes</td>
<td>NO</td>
</tr>
<tr>
<td>Strep Throat</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sore Throat (except strep)</td>
<td>Yes</td>
<td>NO</td>
</tr>
<tr>
<td>Fluid in the Middle Ear (otitis media with effusion)</td>
<td>Yes</td>
<td>NO</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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Poor Humans!!
They try too many antibiotics on me and fail to understand that they are making me IMMORTAL!

Let this not happen

Antibiotic resistance is a threat to your health

Prevent antibiotic resistance

Talk to your doctor or pharmacist

Use antibiotics responsibly and wisely

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“Antibiotic Resistance”

Misuse and overuse of antibiotics has contributed to a phenomenon known as “antibiotic resistance”. This resistance develops when potentially harmful bacteria modify/change themselves in a way that reduces or eliminates the effectiveness of antibiotics. Antibiotic resistance is a growing public health concern worldwide.

When a person is infected with antibiotic resistant bacteria, not only is treatment of that patient more difficult, but the antibiotic-resistant bacteria may spread to other people.

When antibiotics don’t work, the result can be:
1. longer illnesses
2. more complicated illnesses
3. more doctor visits
4. the use of stronger and more expensive drugs
5. more deaths caused by bacterial infections
How does antibiotic resistance occur?

1. High number of bacteria. A few of them are resistant to antibiotics.
2. Antibiotics kill bacteria causing the illness, as well as good bacteria protecting the body from infection.
3. The resistant bacteria now have preferred conditions to grow and take over.
4. Bacteria can even transfer their drug-resistance to other bacteria, causing more problems.

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How can antibiotic resistance spread?

Fertilizer or water contaminated with resistant bacteria are used on food crops.

Contaminated crops can transfer antibiotic-resistant bacteria to humans.

Meat products not handled or cooked properly can transfer antibiotic-resistant bacteria to humans.

Farm animals receive antibiotics causing them to develop resistant bacteria in their gut.

John had a cold and received antibiotics. Resistant bacteria develop in his gut.

John spreads resistant bacteria in his community.

John seeks medical attention at a hospital, regional clinic or other inpatient care facility.

Resistant bacteria spread directly to other patients and indirectly via unclean hands of healthcare providers.

Other patients get resistant bacteria from surfaces within the healthcare facility.

Patients go home.

Simply using antibiotics creates resistance. These drugs should only be used to treat bacterial infections.
STOP THE OVERUSE OF ANTIBIOTICS

YOU NEED TO KNOW!
ANTIBIOTICS ARE LOSING THEIR POWER
SUPERBUGS ARE TAKING HOLD

PREVENT Antibiotic Resistance

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Resistances in bacteria make the antibiotics ineffective. The antibiotics would then no longer be remedies.

With no new antibiotics in sight, it may be difficult to treat even simple bacterial infections in the future.

If antibiotic resistance is not halted, our next generations would not have any effective antibiotic. A pre-antibiotic era like situation - “no treatment” and even simple infections could kill.
"PREVENT Antibiotic Resistance"

**HOW?**

Do not self-medicate with antibiotics. Take only when advised by an allopathic doctor.

Take as advised: at the right dose and at the right time.

Take for all the days recommended (full course). Do not discontinue even if you feel better.

Do not believe that the antibiotics are solutions for all illnesses.

Don’t insist on antibiotics every time you visit your doctor or hospital.

Common cold, sore throat, cough, and ear ache may not always require use of antibiotics.

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SAVE ANTIBIOTICS FOR NEXT GENERATIONS!
Bacteria adapt themselves to the antibiotic environment and become antibiotic resistant. Antibiotics can no longer attack them. Development of resistance is a natural process. But we can prevent it.

Resistant bacteria can infect you and others. These infections are difficult to treat. Antibiotic resistance is not just a problem of an individual but of the community and subsequently a global issue.
Infections with resistant bacteria may fail to respond to first line of treatment resulting in prolong illness and death. The treatment is extremely expensive too.

Complete the entire course of antibiotics as prescribed by your doctor even if you feel better within few dose or days.

Do not buy antibiotics without advice of a Doctor, and without producing a valid prescription at the pharmacy!
Antibiotics are truly miracle drugs that have saved countless millions of lives. But antibiotic resistance is a critical public health issue that is eroding the effectiveness of antibiotics and may affect the health of each and every one of us.

So, “Use antibiotics responsibly and wisely”!

Should you have any questions;

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