

Reading Comprehension

Directions: Read the article below. Then use the text to answer the questions that follow.

There's Hope for Slowing Antibiotic Resistance

By Jeanie Lerche Davis

1 Antibiotics are among the most frequently prescribed medications and are
2 designed to treat infections caused by bacteria. Some types of bacteria, however, can
3 develop a resistance to antibiotics, which **render** the drugs ineffective in treating that
4 type of bacteria. Each year, 160 million antibiotic prescriptions are written for 275
5 million U.S. residents, but half of those prescriptions are unnecessary, according to an
6 editorial in The New England Journal of Medicine (NEJM). In recent times, because of
7 the increased **reliance** on antibiotics, the number of these antibiotic-resistant bacteria has
8 grown dramatically. Doctors have now been advised to use more appropriate strategies
9 when using the drugs.

10 Half of all Americans have mistaken beliefs about antibiotics, according to a
11 study reported last year at the International Conference on Emerging Infectious Disease.
12 Before antibiotics became available in the 1940s, not much could be achieved in terms of
13 curing life-threatening bacterial infections. However, antibiotics have been so successful
14 in curing these infections that many people now believe – *erroneously* – that *they* can
15 cure virtually any disease. “We estimate that at least 40 percent of antibiotics used in
16 doctor’s outpatient offices across the country are being prescribed for conditions that are
17 largely viral, for which antibiotics have no effect,” says Richard Besser, MD, pediatric
18 and medical epidemiologist in the National Center for Infectious Diseases at the Center
19 for Disease Control (CDC). “There seems to be this feeling by the general public that if
20 you are coughing up something green or if it is coming out of your nose, you need an
21 antibiotic,” Besser tells WebMD. “That is just not true.” Physicians get pressure from
22 patients, and they are *giving in to* it. Besser says. “It is clear that clinicians are more
23 likely to prescribe antibiotics if the patient wants one,” he says.

24 Even when parents know that antibiotics will not help their child’s cold, they give
25 it in to pressure from day care workers, according to another study presented at last year’s
26 International Conference on Emerging Infectious Disease. Few day-care providers knew
27 that antibiotics would not end a cold more quickly or prevent it from spreading to other
28 children, the study showed. The vast majority of these workers said they would keep
29 children with colds in day-care if they were taking antibiotics, but would send children
30 home if they were not.

31 The result of all this overuse is an increased number of antibiotic-resistant
32 infections. In fact, there has been a significant increase in the number of streptococcal
33 infections resistant to multiple antibiotics, according to a CDC study published in the
34 NEJM. “We are greatly concerned about the data,” Besser says. “This bacterial strain is
35 responsible for bacterial meningitis, which is an infection of the lining of the brain,
36 pneumonia, and is the leading cause of ear infections in children,” he says. “It is
37 responsible for an enormous amount of disease and is a serious public health problem.”
38 There has also been a significant rise in Salmonella food poisoning with strains resistant
39 to the drug most commonly used to treat children with severe Salmonella infections.

40 A “supergerm” form of bacteria Enterococcus, which invades surgical wounds,
41 causing potentially deadly abdominal, urinary-tract, and heart valve infections, has also
42 developed. Although the bacteria are resistant to virginiamycin, an antibiotic also widely
43 used in treatment of food-producing animals for about 26 years, some of these infections
44 can be treated with another antibiotic, vancomycin.

45 Antibiotic-resistance is a frightening issue, but progress is being made to bring
46 things under control. About 30 percent fewer pediatricians are writing antibiotic
47 prescriptions for children’s infections, Besser tells WebMD. “This corresponds with
48 increased awareness across the country of *this problem*. “ Besser heads the CDC’s
49 nationwide campaign aimed at *appropriate* use of antibiotics.

Comprehension Questions

- 1) What is the overall main idea of this article?
 - a) Antibiotics can be dangerous if given to children
 - b) Doctors prescribe too many antibiotics and that is causing the spread of more diseases
 - c) The overuse of antibiotics is making them less effective; therefore, doctors should prescribe fewer antibiotics.
 - d) Since antibiotics are being used and prescribed more frequently, doctors are to blame for the rise in antibiotic resistance.

- 2) What are antibiotics used for?
 - a) treat bacterial infections
 - b) create resistance
 - c) cure viral diseases
 - d) none of the above

- 3) According to the text, what is the main problem with overusing antibiotics?
 - a) People are becoming more and more reliant on antibiotics
 - b) It is causing diseases to spread
 - c) Bacteria are becoming resistant to the antibiotics
 - d) They are being over-prescribed

- 4) What is the mistaken belief about antibiotics?
 - a) they cause diseases
 - b) they cure almost all diseases
 - c) they are used too much
 - d) they are not always effective

- 5) What is the main idea of the 3rd paragraph?
- a) Day care workers want children to take antibiotics in order to reduce the chances of spreading infection to other children; therefore, they urge parents to give their children antibiotics
 - b) Parents need to give their children antibiotics in order to send them to day centers.
 - c) Though antibiotics may not always be necessary, day care workers often insist that parents give their children antibiotics when the children are sick.
 - d) People mistakenly believe that antibiotics work.
- 6) Antibiotics effectively cure viral diseases.
- a) true
 - b) false
- 7) Physicians prescribe antibiotics because _____.
- a) they earn more money
 - b) patients persistently ask for the medication
 - c) they know that constant antibiotic use is beneficial
 - d) both b and c
- 8) Parents are under pressure from others to give their child antibiotics.
- a) true
 - b) false
- 9) Why is the antibiotic resistance to streptococcal infections particular a concern?
- a) because streptococcal infections are fatal
 - b) because the strep bacteria is responsible for several diseases
 - c) because streptococcal infections lead to Salmonella
 - d) because there is not available vaccination against the strep bacteria
- 10) Being infected by a variation of the Enterococcus bacteria may result in a fatal illness.
- a) true
 - b) false
- 11) Vancomycin can sometimes be used to replace virginiamycin.
- a) true
 - b) false
- 12) According to the article, a reduction in the amount of antibiotic resistance has recently been seen.
- a) true
 - b) false

- 13) According to the text, how are medical researchers hoping to slow antibiotic resistance?
- a) by spreading awareness about the proper use of antibiotics
 - b) by advising doctors to prescribe fewer antibiotics
 - c) both a and b
 - d) neither a nor b
- 14) The word **render** in line 4 means ____.
- a) make
 - b) result
 - c) prevent
 - d) encourage
- 15) The word **reliance** in line 7 means _____.
- a) use
 - b) dependence
 - c) hope
 - d) need
- 16) **They** in line 14 refers to _____.
- a) people
 - b) doctors
 - c) medication
 - d) antibiotics
- 17) The word **erroneously** in line 14 means _____.
- a) quickly
 - b) slowly
 - c) incorrectly
 - d) accurately
- 18) The phrase **giving in to** means _____.
- a) allowing
 - b) passing
 - c) fighting
 - d) forcing
- 19) **This problem** in line 48 refers to _____.
- a) overcrowding in nursery schools
 - b) excessive prescription of antibiotics
 - c) medical visits
 - d) parents being forceful with doctors
- 20) The word **appropriate** in line 49 means _____.
- a) suitable
 - b) reduced
 - c) collected

d) avoiding