

LETTER TO EDITOR

Antibiotic Resistance: A Neglected Aspect in Clinical Practice

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To,
The editor,

Drug resistance is an inevitable biological process, however even though as physicians, we are augmenting it. After discovery, Nobel Prize winner Alexander Fleming said, "The thoughtless person playing with penicillin treatment is morally responsible for the death of a man who succumbs to infection with a penicillin-resistant organism." Most people didn't die of cancer or chronic lifestyle diseases, because they didn't live sufficient to develop them. Unfortunately, they died of infections yet again because of a fact named antibiotic resistance.¹ Penicillin was strewn in 1943, as over the counter drug, thus became resistant only after two years. Likewise, recently, Daptomycin, became resistant after only one year in 2004. Bacteria develop resistance so quickly that pharmaceutical companies have decided making antibiotics is not in their best interest, so there are infections moving across the world for which, out of more than 100 antibiotics available on the market, two drugs might work with side effects, or one drug, or none.² In 2008, the Center for Disease Control and Prevention (CDC) identified, doctors in Sweden diagnosed a man from India with a different infection resistant to all but one drug that time. The gene that creates that resistance, known as NDM, has now spread from India into China, Asia, Africa, Europe and Canada, and the United States. In United States and Europe, 50,000 people a year die of infections which no drug can help. In the United States, 50 percent of the antibiotics given in hospitals are unnecessary. In the United States, possibly 80 percent of the antibiotics sold every year go to farm animals, not to humans, creating resistant bacteria that move off the farm in water, in dust and in the meat of the animals. Aquaculture depends on antibiotics too, particularly in Asia, and fruit growing relies on antibiotics to protect apples, pears, and citrus,

against disease. And because bacteria can pass their DNA to each other like a traveler handing off a suitcase at an airport, once we have encouraged that resistance into existence, there is no knowing where it will spread.³ To combat this, first "World Antibiotic Awareness Week", celebrated from 16 to 22 November, this year, in effort to increase awareness of large-scale antibiotic resistance and to encourage best practices among the patients, physicians, paramedics and other stakeholders, to avoid further surfacing and stretch of antibiotic resistance. Furthermore, it's our own responsibility as the vigilant member of the clinical society to prevail ethical practice regarding tackling antibiotic resistance.⁴ We could relinquish prescribing antibiotics if we aren't certain it's the accurate one. We could discontinue insisting on a drug/medicine for our children throat illness before we're convinced what the bug is causing it. We potentially undertake each other never again to purchase chick or shrimp or fruit raised with everyday antibiotic utilization, and if we did those things, we would halter the arrival of the post-antibiotic era. But we've to do it as early as possible.⁵

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