

# Ethical Issues in Family Practice

## Global Drug Resistance – who is morally responsible?

Used wisely and widely, the drugs we have today can be used to prevent the infections of today and the antimicrobial-resistant catastrophes of tomorrow. However, if the world fails to mount a more serious effort to fight infectious diseases, antimicrobial resistance will increasingly threaten to send the world back to the pre-antibiotic age. Our grandparents lived during an era without effective antibiotics. We don't want the same situation for our grandchildren.<sup>1</sup>

GH Brundtland

**Dr. A:** Hello, you look particularly grim. Is it the coffee?

**Dr. B:** I wish it were. I have just read an article on global drug resistance and it looks like we humans are facing a serious problem.

**Dr. A:** Tell me more.

**Dr. B:** It seems that our species has been so successful in spreading over the world and changing it, sometimes more to our liking. It is difficult to see us in relation to other forms of life, to see ourselves "in nature". We have somehow made ourselves different and set ourselves apart from the rest of the world, and this may be our downfall.

**Dr. A:** You are being philosophical. Anyway, I read an article too, which reported that the "once curable diseases are in danger of becoming incurable and almost all major infectious diseases are becoming resistant to existing drugs". Despite the ingenuity of humans in developing drugs to fight diseases, nature has proven to be infinitely more resourceful. The facts are grim: In 1998, ten million people worldwide died from infectious diseases, 85% of which were caused by acute respiratory infections. In the USA, 140 000 deaths per year are attributed to nosocomial (hospital-acquired) infections. In 1952, penicillin cured nearly all staphylococcal infections, but by 1982, it could only cure less than 10%.<sup>2</sup>

**Dr. B:** Do you realise that the increasing drug resistance is essentially a human-made occurrence? The moral responsibility lies mainly with doctors. Also the patients, overall degradation of the biosystem and global politics have a role to play. If serious consideration is not given to the issue of global drug resistance, we will face a human catastrophe. The World Health Organisation stated that "once curable diseases such as sore throats, ear infections, tuberculosis and malaria are in danger of becoming incurable".<sup>3</sup>

**Dr. A:** From my understanding, increased drug resistance occurs when doctors fail to diagnose a disease properly and prescribe the wrong drug, over prescribe drugs or when they sub-treat their patients. And patients are implicated when they fail to take the prescribed course or take inadequate amounts of medication like

antibiotics, demand antibiotics for every condition or take inappropriate antibiotics.

**Dr. B:** The problem of global drug resistance is big. But, let us focus on antibiotic resistance. Resistance generally means that an organism ceases to be destroyed or inhibited by a drug. In other words, the agent loses its previous efficacy and the future treatment of patients is placed at risk.

**Dr. A:** You are correct. All antibiotic resistance has a genetic basis. Some organisms like *Pseudomonas* species and *Enterococci* are inherently resistant to many antibiotics, probably as an evolutionary response to exposure in the natural environment. Those are not really a harm to healthy people, but hospitalised patients are vulnerable. Antibiotics destroy all susceptible bacteria, "selecting out" the resistant strain and when this happens, previously minor populations of antibiotic drug resistant organisms become dominant.

**Dr. B:** And it would seem to me that the value of each new antibiotic ends up being eroded by increased drug resistance. Then we need newer and even more expensive antibiotics. But the problem is that new antibiotics act in the same way, hence the cycle continues. When Vancomycin came on the market in the 1990s, it was considered the last defense against many infections, but organisms have become increasingly resistant to it. Also, remember that drug resistance can arise from diverse mechanisms such as mutational resistance, horizontal transfer of genes and through clinical resistance.

**Dr. A:** Do you know that *Gonococcus* is now resistant to sulphonamides, penicillin, tetracycline, and ciprofloxacin, while *E. coli* has shown resistance to ampicillin and trimethoprim?

**Dr. B:** This is quite frightening. We as doctors have a moral responsibility to prescribe prudently and knowingly, not just to give into the whims of patients who demand treatments, like in common cold where antibiotics are readily prescribed even when there is no evidence to support such decisions. In addition, we should be knowledgeable concerning resistance profiles of the antibiotics we prescribe. We have a further responsibility to tell our patients why it is important to comply with instructions on how to take their medicines.

**Dr. A:** Definitely, antibiotic misuse is common. Studies indicate that up to 79% of treatment courses are unnecessary or inappropriate. Therapy is often unnecessarily prolonged and prophylaxis is often inappropriate or given at the wrong time.<sup>4</sup>

**Dr. B:** That is a crucial reproach and something we all must address seriously.

**Dr. A:** Food for thought.

**Dr. B:** Sorry, you can't end it that way this time because food is implicated. Antibiotics are part of the usual treatment in

plant and animal production and that's a contributor. In addition, being ill and poor affects health care choices and drug resistance.

**Dr. A:** We can then extend your argument to the problem of weather pattern changes, ozone depletion as these affect global drug resistance too.

**Dr. B:** It seems that if we are to get it right, we doctors must think again about ourselves as part of nature and to accept moral responsibility for self, others and future generations in the struggle against global drug resistance.

**Dr. A:** That's the idea!

## References:

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## Book Review

### Because cowards get cancer too...

*John Diamond*

London: Vermillion, 1998  
240pp  
ISBN 0-09-181664-5

John Diamond was a British journalist who had been diagnosed with tongue cancer, and then decided to write about his experience. Millions of readers followed his weekly columns in The Times, until he died in March 2001.

This book is not a collection of his columns, but draws on them to create a captivating account of his journey. Diamond calls it an attempt to write the book he was looking for on the night he heard the bad news. "The one thing I learnt is that my reaction to the diagnosis and the treatment was nothing like I expected it to be."

He reflects on the banality of cancer, the inability of others to deal with his illness, the myths and taboos that surround the word. He rails against those who see cancer as some sort of battle where victory only goes to the brave and pure of heart, and against those who believe that cancer can only be cured by positive thinking and alternative medicine. He writes with honesty and remarkable wit.

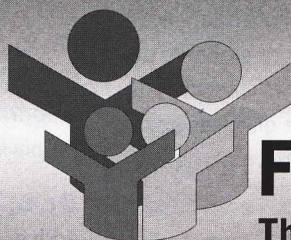
He has kind words for his doctors, even though it took them some time to find the primary lesion. He describes them as "men and women who claim they are just doing their job when they appear, calm and unruffled, like Mills and Boon doctors, on a Sunday evening to explain what's going on, or take calls in the small hours of the morning to come and sort my throat out."

Diamond writes that he will never feel the same about a cold, or a backache again, even though he describes himself as a hypochondriac. "Just as being paranoid doesn't mean they're not out to get you, so being a hypochondriac doesn't mean you're not about to die." He writes about the dilemma that he suffered much more because of the cure than because of the cancer. He initially had radical surgery and later radiotherapy. Diamond describes his experiences in great (gory?) detail.

I could not put this book down. At some British medical schools, it is now a prescribed book for undergraduate students. This example ought to be followed by others. The book can help us to be more patient-centred, by improving our understanding of a person's experience with cancer.

Review by Elma de Vries

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