

ON THE GLOBAL FRONT LINES
OF MODERN MEDICINE

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RICHARD HORTON



Health Wars

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of Modern Medicine

Richard Horton



New York

Preface

THE FIRST JOB I took after I qualified as a doctor in 1986 was “house officer” (an intern, in US parlance) for a surgeon who specialized in stapling the stomachs of very large people. My main responsibilities were taking histories from new patients, doing scut work for the rest of the surgical team (such as ordering take-out dinners when we were on call), and accepting the blame when things went wrong. My boss was an impatient man—he was an obsessive squash player—and he insisted that I stand in the operating room all day watching him cut and sew. That meant I had little time for pleasant conversation with new patients. One morning, the ward was chaotic with nurses ushering out barely sutured but nevertheless grateful patients while squeezing in, as best they could, a new cohort of the hopeful sick. I had eight names on the day’s operating list, so my encounters with each of them amounted to hardly more than “Hello, are you the person with a right inguinal hernia? Good, then sign here.” I was halfway down my list when I arrived at the bedside of a man in his sixties. I went through a brief and routine lecture about the dos and don’ts of the ward. He looked at me rather vaguely. I pushed the consent form in front of him—again he looked at me uncomprehendingly. My heart sank. All doctors will recognize this feeling. I raised my voice a little, asking him

again to sign the consent form *please*. He mumbled something back to me, but I did not understand him. My eyes projected irritation. And then he picked up a pad of paper and a pen and wrote, "I am deaf." I will go to the grave remembering (and deserving to remember) the cruel discourtesy I inflicted on this man.

But I shall also remember this. On a Saturday afternoon at a busy teaching hospital in Birmingham, England, I was the medical resident on call for the weekend. I carried the pager, which, if it went off, would alert me that a patient had collapsed somewhere close by with a suspected cardiac arrest. It did go off that afternoon, around three o'clock, and a crackling voice reported that a man had arrested in the hospital's swimming pool. I ran with the house officer, who was on call with me, to the pool, across a road and pushing a rickety cardiac arrest trolley, all the time trying to hold on to the defibrillator as we went. When we finally reached the pool area we saw that the man, who was in his fifties, had been pulled out of the water and was lying unconscious at the poolside. He was pulseless, had stopped breathing, and his heart was flatlining on the cardiac monitor. We bagged air into his lungs and shocked his chest several times with escalating voltages of electricity. At last, a weak pulse started and he began taking shallow breaths. He had a rough course over the next day or so. But he recovered and went on to have specialized diagnostic studies which showed that the electrical impulse of his heart followed an abnormal path on its journey through the cardiac muscle. Surgery rectified the problem completely, as surgery so often does. His wife was a receptionist at the hospital. She baked me a lovely cake.

Medicine is inevitably about death as well as life. And death makes its mark on all doctors, whatever defenses they (say they) might develop or deploy. Doctors are not unique witnesses of death. If we are fortunate, we will all have the privilege of being with those we love most when their last breath leaves their body. The difference for doctors, perhaps, is not only that they experience death more often,

but also that the circumstances of the deaths they experience are frequently more extreme—the consequences of violence or trauma, the multiple lines hastily inserted into arteries and veins in the emergency room, tubes pushed down the trachea or esophagus, and, of course, blood. We do not do death very well in Western cultures. Even in an age that celebrates its lack of respect for tradition, the details of how a person dies remain taboo, presumably because they bring us face-to-face with how we ourselves might die. Our inquiries stumble and our interest falters, and we will go to almost any lengths to avoid such a confrontation until the day when we have no choice in the matter.

One death still haunts me because of its silent ferocity. I had admitted a man in his seventies to the hospital one evening with a history of bleeding from what seemed to be his stomach. He had vomited a little blood earlier in the day. His blood pressure was low and so we put him to bed. His condition was monitored regularly by the nursing staff. Later in the evening, a nurse called me to say that he had vomited a small amount of what looked like fresh blood. I walked to the ward, drew the curtains around the man's bed, and sat down beside him to examine his heart and lungs. He seemed unconcerned by his episode of sickness and was more bothered by the fact that I had been troubled. I put up another bag of fluid to run through his intravenous line, but as I was about to leave he began to retch. A little blood oozed out between his lips, which I collected into a bowl. The ooze then became a trickle, which soon became a steady stream. A constant flow of blood was now coming out of his mouth—faster and faster and in ever-increasing quantities. He began to panic because he could not catch his breath. I leaned him forward trying to speak calmly to reassure him, but at the same time beginning to panic myself. Would the bleeding stop on its own? If not, how would I stop it? The situation was rapidly spinning out of my control. I squeezed the bag of fluid hard into his vein, and I called the nurse to ask her to find a more senior doctor. Meanwhile, blood was now gushing from the man's

mouth all over himself, the bedclothes, and me. For what seemed like several minutes I was alone with him on the bed behind the curtains as he bled determinedly to death. When the blood finally did stop flowing, I sat there with my arms around a warm corpse. His skin was white and his eyes stared forward into the pool of blood lying before him. He had watched himself die and he had seen and felt my complete inability to do anything to help him. This scene comes into my mind most days, even now some fifteen years later. It was not a violent death in the ordinary sense of the word. There was no external sign of injury. I found out later that the large blood vessel carrying blood from his heart—the aorta—had fused with his esophagus. When the aorta finally ruptured into his esophagus, as it sometimes does, his heart simply emptied all the circulating blood into his mouth and stomach. He had no chance of surviving once the rupture took place, but he knew nothing of this as he watched the blood accumulate in front of him. What must his last thoughts have been?

These are the sort of personal stories that all doctors can tell. And we do tell sanitized and satirized versions of them to one another—all the time. When I have occasionally ventured to repeat them to non-doctors, there might be a horrid fascination, but rarely does a serious discussion follow. It is all just too intimate. We prefer to see medicine as a series of impersonal scientific discoveries or, if we must attach disease to real human beings, as successes ranging from the routine to the extraordinary. Sometimes the story of a terrible mistake is disclosed, and then we express outrage because we do not have the language or experience to discuss medicine as it truly is. We can only talk of medicine as it is not—bloodless, aseptic, and somehow divorced from our own understanding of humanity.

This volume of essays tries to take some of what I see as the most interesting and important issues in contemporary medicine and to spend time reflecting on their implications not only for health and disease but also for our wider culture. After traversing so many subjects,

it may seem that medicine is an irredeemably fractured discipline, divided into a multiplicity of specialties with competing interests. In some respects, this is true. But there remains a unifying idea binding together all parts of medicine: the notion of the dignity of an individual incapacitated by illness. I find dignity a tremendously powerful and inspiring concept, yet it is one that is outside the mainstream of medical and cultural discussion about disease and the purpose of healing. If I had to single out one argument in this book that is more important than any other it would be that a successful future for medicine depends on recovering the notion of human dignity and making its restoration the conscious objective of every practicing physician. This is the subject of the final chapter.

I also see medicine as an immensely important cultural force in society, one that is largely underrecognized, even dismissed, by the contemporary authorities of our culture. In an otherwise excellent analysis of the erosion of news values in America, two distinguished editors of *The Washington Post*, Leonard Downie Jr. and Robert G. Kaiser, argue that

government, political, foreign, and other news of importance to peoples' civic lives was largely supplanted [in the late twentieth century] by crime, weather, health, consumer, investor, entertainment, and other news believed to be of more interest to viewers and readers in their personal lives.¹

Downie and Kaiser see this focus on health as a means “to attract and entertain audiences to sell advertising and make money.” I understand this argument and have felt the force of it myself. In the late 1990s I wrote a weekly column for a British Sunday newspaper, *The Observer*, about medicine. This paper is a serious broadsheet, but the supplement in which my column appeared was devoted to lifestyle (it was called *Life*) and it was packed with advertising. I was regularly

sent press releases and product announcements describing new beauty treatments or cosmetics. Medicine, to the editors of that newspaper, meant the surface appearances of health—beauty and cosmetics—and nothing too shocking for its Sunday readers. The only column I wrote that was spiked was an attack on monthly women’s and men’s magazines for their near-exclusive focus on health as a commodity of narcissism. The piece was something of a rant and the editor was right to turn it down. Yet health is so much more than tanned skin and toned musculature. The forces that surround medicine are some of the most potent and political of our times.

Issues such as the global burden of disease, the threat of infection, war, HIV/AIDS, the epidemic of cancer, bioterrorism, the implications of the human genome, genetically modified organisms, vaccination, surgery, and euthanasia help to define modern global societies in ways that conventional political, economic, and social forces barely touch upon. These threats are shaping the opening decade of a new century and are likely to influence human history well beyond that. They are events that are usually the concern of a closed professional discipline, but they are also matters that all citizens should be informed about and have a say in. Doctors, with a few notable exceptions, have not done especially well at taking their subject to the public and debating it with those they tend and treat.

Take tobacco. This multibillion dollar industry kills about five million people each year.² The figure is rising annually—there were one million more deaths attributable to tobacco in 2000 than in 1990, with most of the increase coming from developing countries where aggressive advertising campaigns are finding new and younger markets for would-be smokers. Evidence shows that the tobacco industry and its lobbyists have sought to thwart legal efforts to protect the public’s health from a proven addictive drug.³ In 2003, the US Justice Department filed court documents claiming that these practices required a payment of \$289 billion in reparations to American taxpayers.

Worse, governments have tried to derail the world's first ever global health treaty—the Framework Convention on Tobacco Control. The US embassy in Saudi Arabia wrote to the Saudi Ministry of Foreign Affairs in 2003, immediately before the final negotiating session on the framework convention. The US government was seeking to weaken this treaty by countering public health arguments with the concerns of trade ministries. In a letter to President Bush, Representative Henry Waxman pointed out that the US government's position was even more pro-tobacco than that of Philip Morris! Fortunately, the World Health Organization (WHO) won agreement for its groundbreaking treaty in March 2003. The legal conditions have now been created to use taxes, product labeling, and advertising restrictions to limit the consumption of tobacco products.

Or look at the pharmaceutical industry. The US market for prescription drugs is around \$130 billion (£7 billion in the UK). Many valuable medicines have been designed and brought to market successfully by drug manufacturers. But the pharmaceutical industry is, above all, and in the words of Professor John Abraham from the UK Centre for Research in Health and Medicine, “a political player.” He argues that

the present drug regulatory systems are insufficiently robust in their political relations with the pharmaceutical industry, because they prevent proper public accountability, are highly vulnerable to industrial capture, and permit the industry's scientific experts to have extensive conflicts of interest while providing their expert advice.⁴

Two former editors of the *New England Journal of Medicine*, one of the world's leading medical research journals, have claimed that “the consequences of continuing to allow an essential industry to put profits above public interest are simply too grave.”⁵ The public

responsibilities of the tobacco and pharmaceutical industries are civic issues of our time.

The shape of modern global society is also being molded by disease. The most tangible example is the effect of HIV/AIDS in Africa. A devastating mix of biology and behavior has produced an epidemic that threatens to destroy the future of a continent. The disease is eliminating working adults and young children. In 2001, 700,000 children became infected with HIV in Africa; 500,000 children died. Life expectancy is expected to fall in countries such as South Africa, Zimbabwe, and Botswana from sixty years of age in 1990 to thirty by 2010. The economic impact of these huge and rapid shifts in population structure will accelerate an already measurable decline into poverty. When families are threatened by the loss of their main income-earner, children are taken out of school and put to work. Education then collapses along with the economy. Orphanhood, once only the result of short-term episodes of war or famine, is now a long-term challenge that neither the international political nor humanitarian communities have a response to. By 2001, over 12 million African children had lost their mother or both parents to HIV/AIDS. That figure is expected to double by 2010, representing one in ten children.⁶ The lack of concerted global action to stop the 16,000 new HIV infections estimated to take place each day has been called a crime against humanity by leading international AIDS experts.⁷

The evolution of human settlements is further fertile ground for those pathologies that are a product of our short-term success as a species. The creation of urban centers seems to be linked to the emergence of asthma,⁸ a disease almost undetectable in rural communities. And Salim Yusuf, a leading researcher into cardiovascular disease, claims that it is urbanization, with its associated increase in consumption of high-calorie foods, fragmenting social structures, diminished physical activity, and greater tobacco use, that is driving new waves of heart disease across the developing world.⁹

The present news—and so the public—agenda in medicine is driven mostly by events, whether these are new discoveries reported in scientific journals or epidemics of new diseases, such as a deadly outbreak of severe acute respiratory syndrome (SARS), which prompted the World Health Organization to issue a global alert on March 15, 2003, and to coordinate international efforts to identify and treat this puzzling illness.¹⁰ But the slow news of disease also deserves front-page coverage, since the existing standards of news reporting hide issues of not only health but also public policy importance.

One example of this hidden news is China. While the March 2003 National People's Congress focused on the transfer of power from the septuagenarian old guard of Zhu Rongji as prime minister and Jiang Zemin as state president to Wen Jiabao and Hu Jintao (both aged sixty), respectively, China was facing several largely unreported public health disasters. Suicide is now China's fifth-most-common cause of death, and it is the leading cause of death among young adults. Unlike elsewhere in the world, the suicide rate is far higher among women, especially those women living in rural areas—the number of women committing suicide outweighs the number of men by three to one. Why is this? Most theories point to the low status of women in Chinese society, the absence of legal or religious prohibitions against suicide, weak social-support networks in rural areas, the ready availability of pesticides in the homes of most families, and a lack of medical staff to treat episodes of attempted suicide.¹¹

Sexually transmitted diseases are recognized to be another growing problem in China—a “hidden epidemic,” according to one recent report.¹² The reemergence of prostitution in an era of aggressive capitalist-style economic reform, after the virtual eradication of commercial sex work under Mao, is the likely explanation for this new health crisis. Almost one in ten Chinese men report visits to prostitutes in the preceding year, and over 90 percent describe irregular use of condoms.

Given the sheer size of China's population—1.3 billion people out of a global total of 6.1 billion—its blood supply could have important effects on the global community. Traditional cultural beliefs in China, according to Hua Shan and colleagues working in China and the US,¹³ encourage citizens to view loss of blood as harmful to health and as a betrayal of their family forebears. Volunteer donors are therefore in short supply, producing a sometimes coercive employer-driven market in blood. The risk of infection from hepatitis B and C and HIV remains. Shan concludes his analysis by arguing that

Improvement of blood safety in China is of global importance. As the world becomes an increasingly interconnected community, the spread of infectious diseases in one part of the world can pose a serious threat to the rest of the world. Therefore, control of existing infectious diseases and surveillance for new diseases in China have the potential to benefit the entire global community.

And yet China is largely ignored by news reporters—and so by the wider Western public. SARS is likely to erase such indifference. This mysterious and fatal lung disease caught Chinese officials by surprise. In March 2003, the government banned WHO scientists from visiting Guangdong Province, which borders Hong Kong and where the SARS outbreak was concentrated. China claimed that after a brief epidemic (the number of cases was first reported to be 305), the disease had burned itself out. But by the end of March, the government realized that SARS was a far bigger problem than it had initially thought. WHO experts were allowed into the country to conduct their own independent investigation. China's demands for privacy could no longer be sustained in the face of thousands of infections worldwide.

China's authoritarian overmanagement of information was strongly criticized by WHO and others. After decades of fear about threats to

the country's political stability, the government found being in the global media spotlight hard to tolerate. Zhang Wenkang, China's minister for health, rejected WHO's travel warning about Hong Kong and Guangdong. Poor surveillance systems made following the epidemic difficult, and WHO's efforts were hampered when its team was shut out of military hospitals. Government officials continued to claim, despite evidence to the contrary, that SARS was under control. But by mid-April, the disease had infected two thousand people. The country's reputation for "socialism with Chinese characteristics"—that is, rapid economic liberalization—so carefully crafted by its leaders was being badly damaged. Eventually, Hu Jintao and Wen Jiabao admitted that the public health emergency was "grave" and "too dreadful to contemplate." The May Day holiday was canceled. Zhang Wenkang was sacked. China was beginning to enter the global information as well as trade communities, for the first time in its history.

A further area of neglect is child health. Western culture has spawned sometimes violent protests about animal rights. And yet very few people take to the streets, call public meetings, or write to newspapers about the 11 million children under five years of age who die each year, half of whose lives could easily be saved if the correct measures were put in place.¹⁴ These measures do not require high-tech solutions. Two million children die from diarrheal disease every year. Solution? Clean water, good sanitation systems, and oral rehydration therapy. About two million children die from pneumonia. Solution? Breast-feeding and access to cheap antibiotics. Another million die from malaria. Solution? Insecticide-treated bed nets and, again, cheap drugs. Seven hundred thousand children die from measles. Solution? A very effective vaccine. In the Western world, the challenge of child health is diametrically opposite to that facing the developing world. Whereas over 60 percent of childhood deaths in developing countries are linked directly to undernutrition, in the rich world it is obesity that is the foremost public health crisis

among children—a crisis, it must be said, fueled by an advertising-driven sugar-sweetened soft-drinks industry aiming specifically to attract children through promotions linked to games, toys, films, and clothing.¹⁵

Why are these issues—deemed “soft news” by Downie, Kaiser, and other supposedly high-brow commentators on our culture—not center stage in today’s political debates? Partly because health and disease are interpreted as matters of lifestyle and not—as they are—profoundly existential, public policy, and geopolitical concerns. But the marginalization of medicine also owes a great deal to sclerotic establishment attitudes in journalism and public affairs, which have failed to adapt to changing forces within society. Perhaps most fundamental of all, the inattention to medicine that does the public such a disservice is due to a straightforward lack of knowledge among the opinion-forming political and journalistic elite about why disease matters beyond the confines of the clinic or hospital.

Doctors have not helped this cause. Their public disputes have usually focused on their threatened professional rights, eroded financial status, or declining political influence. The substance of what they do has been carefully protected, until recently, from public scrutiny. But science is now demanding that doctors step further into the arena of public debate. As Craig Venter, a co-discoverer of the sequence of the human genome, pursues the elusive and possibly crazy goal of creating life (albeit bacterial life) from nothing more than a bag of chemicals,¹⁶ and as animal cloning reveals that genetic technologies can bring diseases forward in time (Dolly the sheep developed premature arthritis and died from a progressive lung disease usually found in older sheep), doctors will not only need to interpret the implications of these developments for a concerned public but also help shape opinion about the place of these technologies in modern society. They have done little of either so far.

Doctors are also well placed to influence public debates about the

evolution of research into human disease. A good example is the announcement in 2003 by Bill Gates that his foundation is donating \$200 million to pinpoint critical research questions about the major causes of disease and disability in the world today. But which questions? Gates has put together a panel of scientists, led by Harold Var-
 mus, the Nobel Prize winner and former director of the National Institutes of Health, to devise ten questions, the answers to which “would save the most lives.” Gates wants the panel to take a global view, shifting the emphasis of research away from richer nations. At present only 10 percent of research money is spent on the diseases that cause 90 percent of the health burden in the world today. The public too has a part to play in deciding what questions matter most to them, and doctors, together with scientists, have a valuable role in stirring this debate. So far, they have been silent.

I wanted to call this book “Wretched Arguments at the Sick-Bed,”¹⁷ in homage to my hero, Pliny the Elder (AD 23–79), who leveled many correctly trenchant criticisms against doctors and the medicine of his day. Wiser publishing heads prevailed. But that is nevertheless what this book is about. Wretched arguments about human disease, debates that I passionately believe are central to an understanding of our most personal worlds as well as global society. The best that I can hope for, if you read any part of this book, is that you will strongly take issue with me.

* * *

The rule in writing medical research papers is that one should ask permission before acknowledging another person. The idea is, of course, that the person being thanked may not want to be associated with the work in question—the embarrassment may simply be too great. One final—perhaps *the*—joy in writing this truly last paragraph (even though it comes near the beginning) is that I can thank whomever

I wish, and they may be mystified, angry, upset—or just plain embarrassed. The influence of others on a person’s work does not conform to a linear relationship, in which the greater their physical presence, the greater the force they exert on your life. The very briefest encounter may have the most profound effect. I have included people who have been materially decisive to this book—decisive in the most personally conceivable sense—two of whom, sadly, I have never met: my birth parents. Thank you, then, to (alphabetically) Robert Beaglehole, Barbara Beddow, Anne Bowler, Iain Chalmers, Ron Cockitt, Peter Cooles, Robin Fox, Hopelyn Goodwin, Clarice Horton, Ken Horton, Martin Kendall, Ann Löfgren, Stephen Lock, Steve Logan, Faith McLellan, Maren Meinhardt, Bob Michel, Karl Miller, Jane Padfield, Eldryd Parry, Duncan Payne, Albert Pearson, Drummond Rennie, Ken Rothman, Ken Schulz, Tom Sherwood, Richard Smith, Jan Vandenbroucke, Pierre Vinken, Mary Waltham, David Wolfe, and all my colleagues at *The Lancet* who constantly remind me why medicine is such an engaging and enjoyable world to be part of. But particular thanks go to two people. Robert Silvers was the person who took a chance and gave me my first opportunity to write for *The New York Review of Books*. I doubt that there could be any better training for a hopeful writer than being edited by Bob. Michael Shae has been my unflagging editor for this book. His gentle but firm encouragement has meant that I only missed my deadline by one year, instead of several. His questions exposed many unsupportable assumptions throughout these chapters, and anything that makes sense in what follows is in no small part thanks to Michael’s forensic reading. Only I bear responsibility for the errors and imperfect arguments that follow.

—Richard Horton
April 25, 2003

NOTES TO THE PREFACE

1. *The News About the News: American Journalism in Peril* (Vintage, 2003). To be fair, even medicine's own journals and magazines do a poor job of covering the diseases that matter most. See my "Medical Journals: Evidence of Bias Against the Diseases of Poverty," *The Lancet*, Vol. 361 (2003), pp. 712-713.
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14. “The World’s Forgotten Children,” *The Lancet*, Vol. 361 (2003), p. 1.

15. Cara B. Ebbeling et al., “Childhood Obesity: Public-Health Crisis, Common Sense Cure,” *The Lancet*, Vol. 360 (2002), pp. 473–482.

16. Carl Zimmer, “Tinker, Tailor: Can Venter Stitch Together a Genome from Scratch?” *Science*, Vol. 299 (2003), pp. 1006–1007.

17. The full quotation is: “There is no doubt that all these doctors sought fame by means of some innovation, and irresponsibly trafficked with our lives. This accounts for those wretched arguments at the sick-bed when no two doctors gave the same opinion for fear that a colleague’s diagnosis might appear to carry more weight.” See Pliny the Elder, *Natural History* (Penguin, 1991), p. 263. Here are some more of my favorite Pliny lines, all true to this day: “Doctors learn by exposing us to risks, and conduct experiments at the expense of our lives”; “Only a doctor can kill a man with impunity. Indeed, the blame is transferred to the deceased, who is criticised for want of moderation, and it is thus the dead who are censured”; “One is instantly reminded of the malign influence of fashion on medicine, more than on any other science. Even nowadays it is subject to fads, although no science is actually more profitable”; and “Assuredly, there is no greater reason for the decay of morals than medicine.” Pliny the Elder was the Ivan Illich of the Roman era.

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by Richard Horton

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RAT WARS Lyrics. [Verse 1] What was here before the rocks and forests? I don't care It's hard enough to deal with human forces I was never happy for you You were weighing me down You never trusted me But I'm over it now. InfoWars Health. 598 likes. help yourself and others while supporting the Infowar with Alex Jones. 4. Training by myself and our team is available and optional for Info Wars Health Team if you join here. God Bless, Jamel Boukabou, 2 Star Executive, Info Wars Health Team. See More. InfoWars Health. August 11 at 10:30 PM . The Opportunity - Earn income, support Alex and get free personal training from me. HEALTH "RAT WARS": What was here before the rocks and forests? I don't care It's hard enough to deal with human forces... What was here before the rocks and forests? I don't care It's hard enough to deal with human forces.