## Pharmaceutical myths By Marcia Angell 2.5- keling alone as they did on R&D. each new drug to market is based on whether we consumers get

RUG companies want us to believe that soaring prices for prescription drugs are necessary to cover their research and development (R&D) costs - a claim that implies that they spend most of their money on R&D, and that after they pay for it, they have only modest profits left over. Curtailing prices, they say, would choke off R&D and stifle innovation. But the real story is very different.

Big drug companies actually spend relatively little on R&D - far less than they spend on marketing and administration and even less than what they have left over in profits. In 2002, for example, the top ten American drug companies had sales of \$217 billion. According to their own figures, they spent 14 percent of sales revenues on R&D. But they spent over twice as much, a whopping 31 percent, on marketing and administration. And they had 17 percent left over as profits.

Most drug companies lump marketing and administration together in their annual reports, but one reported that 85 percent of the total went to marketing. Assuming that the figure is roughly the same for the other big companies - and there's reason to think that it is - then they spent nearly twice as much on mar-

In its public pronouncements, the industry denies this by counting just four specific activities as marketing - sales visits to doctors, the value of free samples, direct-to-consumer advertisements, and advertisements in medical journals. But, in fact, marketing budgets cover a lot

more than this, most importantly the "education" of doctors (which teaches them to prescribe more drugs).

And what about profits? For many years, drug companies in the United States have had higher profits than any other industry - after they've paid for R&D and all their other expenses. Compare the 17 percent profit margin for the top ten American

drug companies in 2002 with the median of only 3.1 percent for all of America's "Fortune 500" industries that year. In 2003, for the first time, the industry fell slightly from first place to third in terms of profitability, but its profits were still well above the median.

The recent claim that drug companies spend on average \$802 million to bring secret, proprietary data and is wildly inflated. But, whatever they spend on R&D, if drug companies spend more on marketing and have more left over as profits, they can hardly claim that high prices are necessary to cover their R&D. Instead, high prices are necessary to cover their stupen-

dous marketing expenditures and main-

tain their enormous profits. There is now

some pushback on prices, but drug com-

panies are compensating by convincing

more people to take more drugs for dubi-

ous or exaggerated ailments, thereby

drug companies spend on R&D, but

The important issue is not how much

increasing volume.

whether we consumers get our money's worth. Remarkable as it seems, only a small fraction of drugs are innovative in any meaningful sense of the word.

In the six years from 1998 to 2003, of the 487 drugs that entered the market, fully 78 percent were classified by the US Food and Drug Administration as likely to be no better

than drugs already on the market. Moreover, 68 per-The bottom line is that, despite industry cent were not even new chemical compounds, but just old drugs in new forms or combinations. In other words, the major output of the industry is not important new drugs, but minor variations of drugs that are already on the market called copycat or "me-too" drugs. For example, the top-selling drug in the

world, Pfizer's Lipitor, is the fourth of six cholesterol-lowering drugs of the same type. There are now whole families of me-too drugs, and little reason to think one is better than another at comparable doses.

Far from being a model of free enterprise, the pharmaceutical industry is utterly dependent on government-funded research and government-granted monopolies in the form of patents and exclusive

marketing rights. The few innovative drugs usually stem from publicly funded research done at government or university labs. Even among related me-too drugs. the original is usually based on government-sponsored work.

For example, the first of the Lipitortype drugs, Mevacor, came on the market in 1987 and was based largely on university research. Most of today's top-selling drugs have progenitors that date back to the 1980's or even earlier

The bottom line is that, despite industry rhetoric, drug companies are growing less and less innovative. They're just rejiggering the same old drugs, getting new patents and exclusivity, and relying on their marketing muscle to convince doctors and patients that they're producing medical miracles. Every advanced country regulates prescription drug prices in some way. Even in the US, Medicare regulates doctors' fees and hospital payments. So we need not worry about stifling innovative R&D. Drug companies do much less of it than they claim, and what they do they can easily afford. DT - PS

Marcia Angell is Senior Lecturer in Social Medicine Harvard Medical School and author of The Truth About the Drug Companies: How They Deceive Us and What to Do About It

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