ISSUE BRIEF

MÉDECINS SANS FRONTIÈRES

TIME TO ALIGN MEDICAL RESEARCH WITH PEOPLE'S HEALTH NEEDS

We could have the vaccines, tests and medicines that we need, and they could be affordable. But today, many of the tools we need are too expensive, and many needs remain unaddressed by medical research. Governments provide billions of taxpayer dollars for medical research. They have the right - and the duty - to ensure that the money is used to meet people's health needs.

PHARMACEUTICAL CORPORATIONS NEGLECT SOME OF THE WORLD'S BIGGEST HEALTH THREATS.

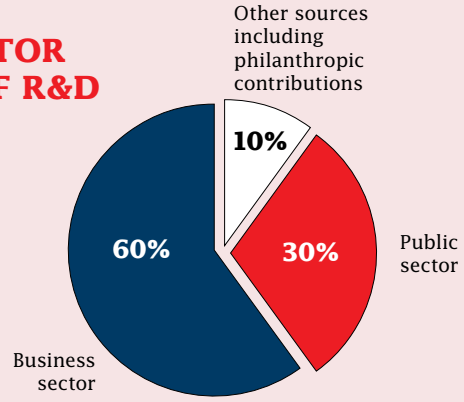
Pharmaceutical corporations have shifted their focus away from infectious diseases, some of which are becoming difficult - or impossible - to treat with drugs we have (such as gonorrhoea and tuberculosis [TB]).[1] Without new and effective vaccines, rapid tests, and treatments, by 2050 drug-resistant infections will kill 10 million people annually.[2]

GOVERNMENTS SHOULD INSIST THAT TAXPAYER-FUNDED RESEARCH ADDRESSES PRIORITY HEALTH NEEDS - BUT THEY DON'T.

Governments contribute US$70 billion to the $240 billion spent annually on medical research,[3] but have largely failed to use carrots (incentives) and sticks (regulations) to get the products we need.

In 2014, only 16% of research funding for poverty-related diseases came from pharmaceutical corporations.[4]

FIGURE 1: PUBLIC-SECTOR FUNDING OF R&D



Source: The Lancet

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EBOLA: WE DON'T HAVE WHAT WE NEED

MSF was the first international organisation to respond to what became the world's worst Ebola outbreak in 2014. We and many others fought to save lives and stop Ebola from spreading - without a vaccine to prevent it, effective tests to diagnose it, or medicines to treat it.

- **Ebola is extremely contagious, and often fatal.**
- **Nearly 29,000 people fell ill with Ebola during the recent epidemic; 11,310 of them died.[5]**
- **Ebola was discovered 40 years ago, yet research to prevent, diagnose and treat it was never prioritised. Without it, the world remains vulnerable to deadly outbreaks.**

"We're sorry that we've failed to stop the epidemic. We're fighting a forest fire with spray bottles."

ELLA WATSON-STRYKER, MSF HEALTH WORKER. SIERRA LEONE, 2014.

ACCESS CAMPAIGN
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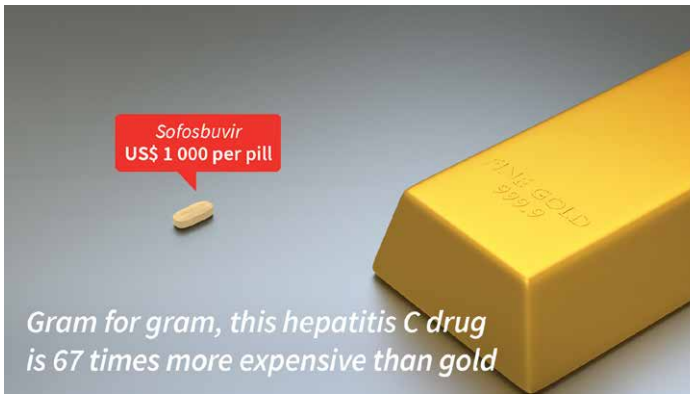
PHARMACEUTICAL CORPORATIONS RELY HEAVILY ON TAXPAYER-FUNDED MEDICAL RESEARCH

Since governments provide funding for medical research, they should require that the resulting products are affordable. Governments give away the rights for products that were developed with taxpayer money by granting patents - exclusive rights to market, sell or use inventions, including medicines - to pharmaceutical corporations. This keeps prices high, by creating monopolies; without fear of competition, pharmaceutical corporations are free to charge what they please. And it leaves us paying twice: once for medical research, and again, for expensive vaccines, tests, and medicines. For example, US government-supported research led to the discovery of sofosbuvir,[6,7] a hepatitis C-fighting drug. But sofosbuvir was priced at 67 times more than gold - leaving the US government to spend billions of dollars on it.

FIGURE 2: DRUGS WORTH MORE THAN THEIR WEIGHT IN GOLD



Source: Andrew Hill

HEPATITIS C: WHAT WE HAVE IS TOO EXPENSIVE

MSF is piloting multi-country, clinic-based hepatitis C virus (HCV) treatment programmes, while fighting for universal access to affordable HCV diagnostics and generic treatment.

- Each year, 700,000 people – most in developing countries – die from HCV-related liver failure or liver cancer.[8,9]
- HCV can be cured by a few months of oral drugs, but high prices have severely limited access to them.
- Gilead priced sofosbuvir, an HCV-fighting drug, according to the 'value' of being cured, not what it cost to develop and produce. Sofosbuvir can be profitably mass-produced for less than $1 per pill,[10] but Gilead launched it in the US at $1,000 per pill ($84,000 for 12 weeks), causing treatment rationing.

"Gilead says that this drug is priced based on the value it provides, but a cure hardly anybody can afford is worthless."

DR ISABELLE ANDRIEUX-MEYER, VIRAL HEPATITIS ADVISOR TO MSF ACCESS CAMPAIGN.

RESEARCH COULD DELIVER THE AFFORDABLE VACCINES, TESTS AND MEDICINES THAT WE NEED

FINDING OUT HOW MUCH RESEARCH REALLY COSTS

We don't know how much is spent on developing vaccines, tests and medicines. Pharmaceutical corporations do not disclose what they spend on research - although they suggest that it is as much as $2.6 billion to bring a drug to market[11] - and governments are not demanding transparency from them. We need to know how much research actually costs to have an honest conversation about the best ways to fund it.

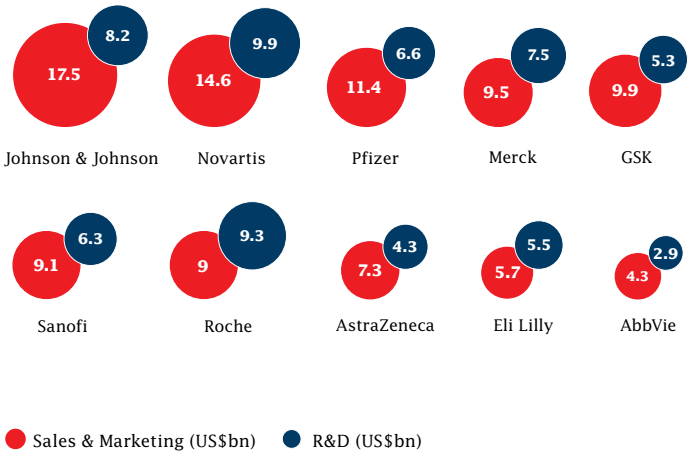
BREAKING THE LINK BETWEEN RESEARCH COSTS AND PRICING

Governments must do much more to ensure people have access to the medicines they need, regardless of the disease they face, what they can pay, or where they live. Funding for research could be managed differently: based on people's health needs, through a process that encourages collaboration, efficiency and affordability. The first step is breaking the link that ties medical research to high prices (this is called *de-linkage*).

We've seen effective products delivered according to these principles – a new meningitis vaccine for $0.50 per dose and half a dozen new, affordable treatments for neglected diseases.

High prices for pharmaceutical products are justified as being essential for 'tomorrow's cures', but pharmaceutical corporations are reinvesting just a tiny fraction of their profits into research. Only one of the world's ten largest drug corporations spends more on research than on marketing.[12]

FIGURE 3: PHARMACEUTICAL SPENDING ON SALES & MARKETING VS. R&D (2013)



Source: GlobalData via Dadavix

TUBERCULOSIS: DRUGS DON'T ALWAYS WORK AND ARE UNAVAILABLE; WE NEED MORE OF THEM

MSF has been fighting tuberculosis (TB) for over 30 years, until recently with decades-old diagnostics and drugs. MSF programmes are facing more and more drug-resistant TB: in the last five years, the number of people MSF has treated for drug-resistant TB has doubled to nearly 2000.[13,14]

- TB, the world's deadliest infectious disease, killed 1.5 million people in 2014.[15]
- Drug-resistant TB requires up to 24 months of drugs and painful daily injections that can cause terrible side effects, including permanent hearing loss, psychosis, and nerve or liver damage - and only 50% of people are cured by them.[16]
- The first new TB drugs in nearly 50 years, bedaquiline and delamanid, are often unavailable in developing countries, where the highest burden of TB is found; only 2% of people who need them are getting them.[17]

> *"Without access to more effective, safer and affordable new TB drugs, it's just deadly business as usual."*
>
> **DR GRANIA BRIGDEN, TB ADVISOR TO MSF ACCESS CAMPAIGN.**

TAKING ON TUBERCULOSIS

The treatment for TB is difficult; six months for simple TB and up to two years for drug-resistant TB. Because TB is not considered profitable, there has been little interest from pharmaceutical corporations to improve the treatments; in fact, no new TB drugs were developed for nearly half a century.

Although drug-resistant TB must be treated with multiple drugs, new treatments are first studied one by one, and then in combinations, delaying access to life-saving treatment for years – and allowing drug-resistant TB to continue taking its deadly toll. *But it doesn't have to be this way.*

MSF's '3P Project'* could pioneer a better, faster way to develop TB treatments. Affordability is built into the 3P Project, because costs are covered upfront. Prize money is awarded for promising new TB drugs at an early stage – to ensure that they can easily be studied with other new drugs. This way, researchers do not have to wait many years for individual drugs to be approved before testing them together. Grants pay for trials that combine new drugs, allowing researchers to find shorter, safer and better treatment for all people who have TB, even those whose TB is resistant to current medications.

* The 3P Project uses **push** funding (grants), **pull** funding (prizes) and **pooling** (sharing) of knowledge and access to new drugs to incentivise collaborative TB research. To learn more about the 3P Project, see: www.msfaccess.org/3P.

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To read MSF's full report on this topic, visit msfaccess.org/livesontheedge/

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