




HindustanTimes.com » HT Research » Current Issues » Story

Only two novel classes of drugs in 30 years

Radhieka Mittal
November 26, 2006

 Feedback
 Send to friend(s)
 Print the story

Advertisement

In 1999 a 13-year-old girl from rural America was brought to a hospital with fever and respiratory distress. A chest X- ray revealed fluid in the lungs and she was treated with antibiotics. Within five hours her blood pressure dropped, she was incubated and treated with a different class of antibiotics. Despite intensive medical care, her health deteriorated and she died on the seventh day from multiple organ failure. An autopsy showed that Methicillin resistant bacteria had infected her left lung.

The above example from the report *Bad Bugs, No Drugs* by the Infectious Diseases Society of America (IDSA) is one of the million deaths caused by infections resistant to drugs. In India such cases are hardly reported because they usually go unidentified.

Until today the medical need for new antibiotics and the pharmaceutical industry's need to make profits

have been aligned. However, according to Antibiotics Innovation Study by ReAct, a multinational coalition, a forward look into what is in the drug companies' pipelines demonstrates a worrying gap.

The report quotes one industry insider: "Thirty years ago there were 40 companies involved in antibiotic development. M&A have reduced the number of companies dedicated to antibiotics."

Eli Lilly, which had dominated the antibiotic field for decades, exited antibiotic research in 2002. According to IDSA, in the 1990's half of the large companies in the US and Japan halted or decreased their antibiotic discovery efforts.

A recent analysis published in *Clinical Infectious Diseases* (CID) found only five new antibiotics in the R&D pipeline out of 506 drugs in development. It also found that FDA approvals of new antibiotics declined 56 percent in the past 20 years. Since 1998 FDA has approved 10 new antibiotics, of these only 2 are novel. Though TB is the second most common microbial cause of death, in the last 30 years no new class of antibiotic has been approved to treat it.

FDA has played a key role in identifying potential health crises. India lacks a centralized governing body to effectively identify and address emerging public health predicaments.

Pharma firms prefer to invest in development of products that give them greater profits, like chronic illness drugs and life style drugs. According to IDSA a musculoskeletal drug is worth \$1.150 billion, while a medicine for resistant bacteria is worth only \$100 million.

However, a listing by Thomson CenterWatch, a Boston-based information company tracking clinical trials, indicates a few companies bucking these trends. These companies claim that the lack of new antibiotics research presents an opportunity. They are using new drug-development technologies in the hope of finding a promising agent and making the leap to an effective treatment.

AstraZeneca, headquartered in London, is conducting antibiotic research at its laboratories and is looking for ways to combat resistant strains of tuberculosis at its Bangalore facility. Novartis is building an anti-infective team with 50 scientists to work at

CURRENT ISSUE

Antibiotic indulgence: N

Quick fix doctors, guilty wide-spectrum antibiotics periods, are aiding a sil reports **Vipul Mudgal**.

Frame guidelines for ho

In India, TB kills around every hour and diarrhoe of six lakhs children eve **Saikat Neogi & Renuk**

Self-medication will unc immune system

Bacteria continue to do best - adapt in order to led to an increasing inci antimicrobial resistance **Preeti Singh Saksena**

A huge & untapped mar

Enabling MFIs to mobili: deposits would be the n writes **Saikat Neogi**.

PREVIOUS ISSUES

- Microcredit makes me
- It helps folks on the n
- A huge & untapped m
- Tool of empowerment
- Citizens activism for ir
- Civil disobedience has haunt authorities
- The Internet is a low i social advocacy
- Time to treat mental I development strategy
- Debts lead to despair
- Pressures push indivic
- Suicides linked to ban
- Clash or confluence of
- Islam wants democra
- A fair consensus alrea
- Current scenario of in

its new research unit.

Big companies are not the only players and experts argue that the cost structure of small and medium enterprises is more appropriate to antibiotic development. The stark fact is that there are only a handful of new antibiotics in the pipelines of all players. More research will only be possible when we have public policy measures to encourage research in the field.



E-mail us



Feedback



Terms & Conditions



Advertisements

© HT Med