

Bad Medicine

Patents: Obstacles or Facilitators of Access to Knowledge

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**Inter-country Seminar on IPRs
and Access to Medicines**

Dhaka, Bangladesh, 6-8 March 2006

Intellectual Property Rights are **state-mandated monopolies**

Notion of IPR is built on a contradiction:

**in order to promote the development of ideas, it is necessary to reduce
the freedom with which people can use them**

“The relentless march of intellectual property rights needs to be stopped and questioned. ... **Alternative approaches to innovation, based on sharing, open access and communal innovation, are flourishing, disproving the claim that innovation necessarily requires patents.”**

UNDP Human Development Report 1999

“The commercial sector discovers and develops nearly all new drugs and vaccines, but this is expensive and risky; **the patent system provides the incentive necessary to investigate thousands of new compounds and to invest an average of several hundred million dollars in R&D”.**

IFPMA: Workshop on TRIPS, Jakarta, May 2000

IPR laws have always been a **compromise between these two, in the last few decades the resolution of the contradiction has tended to **favour the latter****

Facilitator of Creativity?

☞ Creation is facilitated by a temporary monopoly: validity when laws geared to benefit the **individual artisan or author**

☞ But intellectual products, today, are **social products**

☞ Individual creators cease to be the beneficiaries: **replaced by corporate interests**

☞ IPRs place **enormous power** at the disposal of a handful of corporations: to determine the **direction of research**

➔ Handful of Pharmaceutical corporations can decide the **kind of drugs that will be developed**

Increasing Concentration of Pharma Industry

Percent share by value in World Pharmaceutical Market

| | 1987 | 1990 | 1994 | 1997 | 2000 | |
|-----------------------|------|-------|-------|------|------|------|
| Number 1 manufacturer | | 3.42 | 3.99 | 4.9 | 4.6 | 7.3 |
| Top 10 manufacturers | | 27.50 | 28.70 | 31.8 | 36.2 | 45.7 |

Source: IMS Data, cited in J. Morris: Pharmaceuticals Global Insights,

Top Performing Companies

| Company Profit as | Revenues | | 1999 |
|----------------------|----------|--------------|------|
| | Rank | % of Revenue | |
| Microsoft | | 216 | 39.4 |
| Cable and Wireless | | 315 | 38.8 |
| E.I. du Pont | 123 | 27.6 | |
| Eli Lilly | 485 | 27.2 | |
| Telefonos de Mexico | | 482 | 26.1 |
| Volvo | 305 | 25.8 | |
| Intel | 116 | 24.9 | |
| Glaxo Wellcome | 349 | 21.3 | |
| Roche Group | 239 | 20.9 | |
| Petronas | 311 | 20.8 | |
| Bristol-Myers Squibb | 206 | 20.6 | |
| R.J.Reynolds Tobacco | 436 | 20.6 | |
| Novartis | 192 | 20.5 | |
| Pfizer | 285 | 19.6 | |
| Textron | 428 | 19.2 | |

TRIPS Agreement designed to safeguard
“**Rent Incomes**” in sectors where initial
production costs are high but reproduction
costs are low

Overtured the very basis of trade negotiations where classically the **developing nations were considered victims** and special considerations were taken to remedy their problems.

Concept of IPRs has come a **full circle**:

☞ from the initial notion of the **protection of an individual's rights** and the notion of **disclosure of information**

☞ to **protection of the rights of corporations** and a **bar on the free flow** of information.

High Risk Activity?

Seductive argument that:

- ☞ invests huge amounts in **R&D**
- ☞ new product development is **risky** business

Converted IPRs into the “**holy cow**” of trade negotiations, that **nobody dare tamper** with.

Profitability by Industrial Sector (1999)

| Sector | Net Profits % of Assets | Net Profits % of Revenue |
|---------------------------|----------------------------|-----------------------------|
| Pharmaceuticals | 14.7 | 18.3 |
| Beverages | 11.1 | 10.1 |
| Tobacco | 8.0 | 8.5 |
| Specialty Retailers | 6.0 | 2.6 |
| Telecommunications | 5.5 | 10.2 |
| Computers, Equipment | 4.9 | 6.6 |
| Food | 4.8 | 2.2 |
| Aerospace | 4.1 | 4.3 |
| Petroleum Refining | 4.0 | 3.6 |
| Forest & Paper Products | 3.8 | 4.2 |
| Food & Drug Stores | 3.7 | 1.9 |
| Chemicals | 3.6 | 3.3 |
| Wholesalers | 3.5 | 1.2 |
| Airlines | 3.4 | 3.4 |
| Electronics, Electrical | 2.9 | 3.0 |
| General Merchandisers | 2.8 | 1.4 |
| Energy | 2.3 | 2.2 |
| Publishing, Printing | 2.3 | 2.5 |
| Motor Vehicles & Parts | 2.2 | 2.2 |
| Utilities: Gas & Electric | 2.1 | 2.5 |
| Entertainment | 2.0 | 5.6 |
| Health Care | 1.9 | 2.8 |
| Diversified Financials | 1.5 | 11.1 |
| Mail, Package, Delivery | 1.1 | 1.7 |
| Securities | 0.9 | 10.7 |

Profits of Top Global Pharmaceutical Corporations (1999)

| | Company | Revenues \$ million | Profits \$ million |
|-----------|------------------------------|--------------------------------|-------------------------------|
| 1 | Merck | 32,714 | 5,890 |
| 2 | Johnson & Johnson | 27,471 | 4,167 |
| 3 | Novartis | 21,609 | 4,432 |
| 4 | Bristol_Myers Squibb | 20,222 | 4,167 |
| 5 | Astra-Zeneca | 18,445 | 1,143 |
| 6 | Roche Group | 18,349 | 3,837 |
| 7 | Pfizer | 16,204 | 3,179 |
| 8 | Glaxo Wellcome | 13,738 | 2,930 |
| 9 | Smithkline Beecham | 13,562 | 1,704 |
| 10 | American H P | 13,550 | -1,227 |
| 11 | Aventis | 13,438 | -1,035 |
| 12 | Abbott Laboratories | 13,178 | 2,446 |
| 13 | Warner Lambert | 12,929 | 1,733 |
| 14 | Eli Lilly | 10,003 | 2,721 |

If profit margins were to have been **less by a third** — a benefit of about **11 billion dollars** could have been passed on to consumers. That is, more than the projected **10 billion dollars** that are required to **provide access to anti-AIDS drugs to all HIV positive patients** in the world!

This is **profiteering**, driven by rent incomes and not legitimate returns on investment.

- ☞ Those who **need drugs** the most are the **least likely to be able to pay** for them
- ☞ The **income poor**, wherever they live, **spend higher** proportion of total medical costs on drugs
- ☞ In developing regions **larger % of drug costs are paid for privately**

Comparison of Private Expenditure on Drugs

| | Per capita (US \$) | % GDP | Pvt. as % of Total |
|-------------------------------|-----------------------|------------|-----------------------|
| Sub-Saharan Africa | 8 | 0.9 | 65 |
| Asia | 12 | 0.6 | 81 |
| Middle East | 27 | 0.7 | 74 |
| Latin America | 26 | 0.9 | 72 |
| Mkt.Economies | 138 | 0.6 | 40 |

Innovations for Whose Benefit?

- ☞ Drugs which sell in the market have **little relation** with the actual **medical needs**
- ☞ Research and patenting in pharmaceuticals are being driven by the **search for the next “blockbuster” drug**
- ☞ The frantic search for the next “blockbuster” **skews drug development** in favour of new drugs for which there are **buyers who are willing to pay prohibitive amounts**
- ☞ More and more drugs being introduced are **“copycat”** drugs that address **“lifestyle”** needs and not medical needs.

Assessment of New Drugs Introduced Between 1981-2000

| Category | No. | % |
|--|------|-------|
| Major therapeutic innovation in an area where previously no treatment was available | 7 | 0.31 |
| Product is an important therapeutic innovation but has certain limitations | 67 | 2.96 |
| Product has some value but does not fundamentally change the present therapeutic practice | 192 | 8.51 |
| Product has minimal additional value , and should not change prescribing habits except in rare circumstances | 397 | 17.59 |
| Product may be a new molecule but is superfluous because it does not add to the clinical possibilities offered by previous products available. In most cases it concerns a me-too product | 1427 | 63.23 |
| Product without evident benefit but with potential or real disadvantages | 58 | 2.57 |
| Editors postpone their judgements until better data and a more thorough evaluation of the drug is available | 109 | 4.83 |

Source: Prescrire

What, then, Justifies such High Research Costs?

- ☞ Many new drugs are initially researched in **public funded institutions**: Beta-blockers, H2-blockers, Taxol, ACE inhibitors - groups which spawned “blockbusters”
- ☞ Industry driven by rent incomes will **bypass the needs of the income poor**
- ☞ Drugs developed in the 1950s and 1960s to treat tropical diseases have begun to disappear: termed as “**orphan**” drugs.
- ☞ Industry argues that **patented drugs constitute less than 10% of drugs** that are being used in developing countries.
- ☞ But the reason why so few commonly used drugs in developing countries are under patents is **not because new drugs are not necessary, but because pharmaceutical countries do not develop appropriate drugs**

Patents make for Bad Science

- ☞ Protection extends to **protection of test data**
- ☞ Industry argues that granting data exclusivity for test data is crucial, since the development of these data is expensive
- ☞ Trend also towards **less disclosure** of information when patents are filed.
- ☞ Pendulum shifting **away from the concept of “full disclosure”**
- ☞ Studies submitted in support of applications for new licenses for drugs in which **side-effects** had been shown were **less likely than others to be published**
- ☞ Clearly, patents have ceased to be a vehicle of dissemination of knowledge and have become the **tools to constrain its spread** — quite the antithesis of what good science requires.

Patents Retard Domestic Industries

- ☞ Domestic industries outside the developed countries have been able to develop in places where **strong patent production has not been allowed.**
- ☞ Issue is not just that it allowed cheaper versions of patented drugs to be sold, it also led to the development of **world class manufacturing facilities** in a developing country.
- ☞ Today the campaign on access draws strength from :
 - ➔ **Indian Companies** offering anti-AIDS drugs at one tenth to one fortieth of global prices

This could not have happened if the TRIPS accord had been signed in 1975 and not in 1995! **It is this that we stand to lose as we move towards “harmonised” standards**

☞ **TRIPS accord was not pushed through to access markets of developing countries: India accounts for 0.8% of the global market in value terms, in contrast to 53%, 20% and 18% for the US, Europe and Japan**

☞ **TRIPS agreement became a necessity to protect the markets of large pharmaceutical companies in the developed world against competition from cheaper generic drugs manufactured in countries like India and Brazil**

☞ **TRIPS in other words is not about “free” trade, but has to do with protection of markets in developed countries**

The Way Forward



To recapitulate:

→ financial returns for large pharmaceutical companies is evidence of **profiteering**

Patenting leads not only to high prices but also to:

- the **wrong kind of research**,
- to **inhibition of research**,
- to **stifling of domestic industries** in developing countries.



A system which perpetuates such a situation needs to be taken apart and be **replaced by a new system, that brings back a balance between the rights of the inventor and public interest**



Need to develop different mechanisms to promote innovation