REVIEW ARTICLE

ILLS OF THE HEALTH INDUSTRY

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"Corporate Crime in the Pharmaceutical Industry" By John Braithwaite Routledge & Kegan Paul, London 1984, £ 25.00

Illicit drug networks, contraband smuggling and terrorist gangs constitute popular international crime syndicates against which most countries have involved elaborate and sophisticated means of counter. Transnational Corporations (TNCs) also operate an equally organised crime syndicate but to which invariably the states' regulatory and enforcement machinery look the other way or are deliberately kept as inadequate.

Pharmaceutical TNCs are probably the worst of their kind. The pharmaceutical industry forms the nucleus of the health industry. It determines the nature of the health industry and controls the latter completely. Pharmaceutical firms play a central role in health (as well as general) policy making and planning, education of doctors and other health personnel, and of course socialisation of consumers into a ' pill-popping" culture.

Pharmaceutical business is essentially transnational and therefore, its crimes acquire an even more serious concern, especially because there is a gross inadequacy of protection against the ills of the health industry. For instance even in the USA, where the consumer movement is probably the strongest in the world, marketing a drug with dangerous side effects is not even an offence unless the product is actually banned or there has been criminal negligence.

Dr. John Braithwaite in *Corporate Crime in the Pharmaceutical Industry* cites innumerable cases revealing that the transnational pharmaceutical industry has a worse record of international bribery and corruption than any other industry, a history of fraud in the safety testing of drugs, a disturbing record of criminal negligence in the unsafe manufacture of drugs, of unethical practices in pushing drug sales including smuggling and of global law evasion and financial fiddling whose worst victims are third world countries.

Unlike the times and crimes of Hitler, the brutalities of today's leading pharmaceutical corporations have yet to find a prominent place in world history. Many authors have documented in horrifying details the brutalities of the drug TNCs that have built up an industrial empire through inhuman criminal undertakings.

For example, Germany's I. G. Farben (today divided into Hoechst, BASF and Bayer) which operated a massive chemical plant at Auschwitz with slave labour of 300,000 concentration camp workers, tested drugs on a large number of workers who died in the drug-testing programme. The following extract from letters written to the camp at Auschwitz by I. G. Farben indicates the grave nature of the criminal offences indulged in by the pharmaceutical companies to multiply their profits :

"In contemplation of experiments with a new soporofic drug, we would appreciate your procuring for us a number of women . . . - we received your answer but consider the price of 200 marks a woman excessive. We propose to pay not more than 170 marks a head. If agreeable we will take possession of the women. We need approximately 150 . . . . . Received the order of 150 women. Despite their emaciated condition, they were found satisfactory. We shall keep you posted on developments concerning this experiment . . . . The tests were made. All subjects died. We shall contact you shortly on the subject of a new load."

Today Hoechst and Bayer are the largest and third largest drug companies in the world. They made capital through incriminating means; they were criminals and twelve of their top executives were sentenced to terms of imprisonment, for slavery and mistreatment offences at the Nuremberg war crime trials. (It must be noted, not for corporate crimes in which allied forces were equally involved). But once allied control loosened two of the criminals, Friedrich Jaehne and Fitz ter Meer, were appointed chairmen of Hoechst and Bayer, respectively.

Braithwaite introduces his book on Corporate Crime with this horror story and subsequently moves on to expose the various areas and mechanics of crime in the pharmaceutical industry with interesting but emotionally disturbing case-studies.

The Pharmaceutic Global Empire

The foundation for the transnational nature of the drug industry was laid sometime at the turn of

the century but only consolidating itself in the inter-war period. The modus operandi was invariably international traffic in illicit drugs. Bayer, at the turn of the century, used the same mass marketting tactics for heroin as it uses for aspirin or Baygon, the cockroach killer. Bayer even promoted heroin as a panacea for infant respiratory ailments ! Parke Davis similarly promoted with great enthusiasm the therapeutic virtues of cocaine, marketing it as coca-cordial, cocaine cigarettes, hypodermic capsules, ointments and sprays. Roche was heavily involved in the supply of morphine to the underworld and the Canton Road smuggling case — Shanghai, 1925 — revealed extensive involvement of Hoffman-La Roche in the illegal drug trade.

Thus "some of the great pharmaceutical companies of today owe their existence to profits from the trade in heroin and morphine in an era which laid the foundations for the self-perpetuating cycles of addiction to these drugs in modern societies. The next generation might look back on the activities of Hoffman-La Roche in pushing Valium and Librium with disgust equal to that we feel today towards their heroin sales between the wars".

The entire pharmaceutical industry is virtually controlled and dominated by private firms from four countries — USA accounting for 34 percent of world production, Japan 20 percent, and West Germany 13 percent, Switzerland 10 percent, Hundred pharmaceutical firms out of an estimated ten-thousand in the world account for 90 percent of world shipments of drugs; out of these the top 25 TNC's (half of them from USA) account for 50 percent of this sales (UNCTC, 1979).

In 1980, out of the 83530 million dollars production of drugs the developed countries (including East Europe) accounted for 88.5 percent and the developing countries only 11.5 percent (UNIDO, 1980). And within the developing countries India, Egypt, Brazil, Argentina and Mexico accounted for two-thirds of the drug production (UNCTC, 1979). As regards drug consumption the developed world consumes 80 percent and the developing world (including China) 20 percent of the world production (UNIDO, 1980) - an awesome irony when the population ratio is just the other way around. To quote Halfdan Mahler, "the public health services of the 67 poorest developing countries, excluding China, spend less in total than the rich countries spend on tranquilisers" (Mahler, 1981).

On an average drug consumption in some of the poorest countries works out to less than 50 pence per capita, whereas in some industrialised nations it is 35 pounds per capita (Faltorusso, 1981). These figures underline the lack of purchasing power of the third world poor. Essentially, they reveal more about wealth than health. It is, for example, highly debatable whether the level of drug consumption in much of the rich world represents a particularly 'healthy' state of affairs. But one conclusion is inescapable : whereas rich countries can afford to be extravagant with medicines without risking acute social consequences, poor people and their governments cannot. Because they have so little money, it is crucial that it is spent only on essential drugs (Melrose, 1982). Ironically, even the "little money" in the third world is largely spent on drugs which are not necessary at all — this is because of the overwhelming control of drug production and trade in these countries by the TNC's.

Thus as a consequence of this global oligopolistic control and domination (even in free enterprise USA 20 firms account for 80 percent of all drug sales) the pharmaceutical industry has established a position through which any amount of abuse may be hurled at the people without any adverse consequences to the former.

Braithwaite's book consolidates most of the earlier work since the early sixties and puts it together into a comprehensive whole. He also draws a great deal from the US Security and Exchange Commission (SEC) files and rounds it off with 131 interviews with executives of 32 TNC's in five countries. Braithwaite covers a whole range of crimes from simple payoffs and kickbacks for hastening administrative procedures to criminal practices in drug-testing and manufacture, from financial fiddling and oligopolistic practices to malpractices in drug pushing, and from smuggling and international law evasion to abuse of the third world nations.

This survey of pharmaceutical criminal undertakings is adequately supported by a wide range of case-studies from most of the prominent drug TNC's. Here is an overview of the crimes and a few of the case-studies recorded in the book.

Bribery

Bribery is considered as normal and acceptable business practice.. "Almost every type of person

who can affect the interests of the industry has been the subject of bribes by pharmaceutical companies : doctors, hospital administrators, cabinet ministers, health inspectors, customs officers, tax assesors, drug registration officials, factory inspectors, pricing officials and political parties''.

Braithwaite, after a thorough search of SEC files, lists 29 US pharmaceutical firms that have disclosed substantial amounts of questionable payments. No other industry, he adds, has anything approaching this record of *documented* corrupt payments, sustaining the conclusion that the pharmaceutical industry is more prone to bribery than any other international business. Possibly this is because like aerospace, arms, petroleum and other heavy capital goods industry, pharmaceutical firms deal with big win or lose situations — the new billion dollar product to be approved or the multi-million dollar supply contract to a third world government. Passing of a plain envelope of currency notes under the table is not the only method of bribing. In fact, most often more sophisticated methods are used. Braithwaite points out for instance, that if the secretary of a hospital board. owns an architectural firm, a law firm, or a public relations firm, then you can hire his/her firm, perhaps even get some genuine services from it, but pay extravagantly for such services. You can even rent a property from the person concerned at an unusually remunerative rental. The pharmaceutical disclosures show that paying on an invoice to the company for services not actually rendered, or overinvoicing by the company so that an excess can be put aside for the recipient of the bribe have been the most commonly reported practices in the pharmaceutical industry. What is most interesting is that most questionable payments are treated as tax deductible expenditures which means a substantial loss to the state exchequer. For instance Merck, which reported 3.6 million dollars as questionable payments in 39 foreign countries claimed tax deductions and after the disclosure agreed to pay the US Internal Revenue Service additional tax of 264000 dollars. Similarly Warner-Lambert had an additional tax liability of 325839 dollars.

Corruption often reaches highest levels of government as in the following incident reported in the New York Times : In Italy a dozen manufacturers, including some American companies, once banded together to back an industry sponsored bill in the Italian Parliament that would have allowed manufacturers to sell their non-prescription products in supermarkets and other retail outlets. There, they would no longer be subject to price control. One million dollars (80,000 dollars per company) were paid into a war-chest of the ruling Christian Democratic Party.

There is an even more interesting case involving Hoffman-La Roche, who bribed two Kenya government pharmaceutical buyers for favouring their products. *The two health officials were convicted and imprisoned and it was revealed that they had brought quantities of an anti-bacterial and a tranquiliser from Roche that would last the nation for a decade—not a healthy situation with products having a shelf-life of only couple of years.*

What has been done to curtail the menace of bribery ? Nothing of consequence is Braithwaite's conclusion. He cites the instance in Mexico when Portillo came to power. Eight top executives of pharmaceutical TNCs were arrested and jailed; also a number of senior government officials were dismissed. This raid was in reality aimed at launching a moralising campaign to turn into reality the aims set forth by the new government of the republic at Inauguration Day, as also to remove officials who would be a problem to the new government. Of course, after a few days the defendants were released on a bail of one million pesos each and some months later even the charges were dropped ! But such dramatic gestures cannot be sustained for long because once the international business community recoils from the shock and regroups, it is a worthy adversary to the state in instiutional power. Similarly in the USA the SEC disclosures have been firing blanks : who gets hurt in consent settlements ? The SEC gets a notch in its gun. The law firm gets money, the public is happy because they read 'fraud' in the newspaper and think criminality right away. The company neither admits or denies anything. Its the perfect accomodation. And its all one big charade.

Drug Testing

Bribery as a crime seems inconsequential when one looks into the fraudulent practices in safety testing of drugs and unsafe manufacturing practices of the pharmaceutical industry. The crimes in these two sectors have caused irrevocable human damage. At one end there is gross manipulation and cheating in drug research and on the other end cutting corners on product quality in the manufacturing process.

Morton Mintz's exposure of the frauds of the drug industry was a pioneering effort and set in an

era of greater vigilance towards illness-business. In 1962 the FDA made multiple seizures of Regimen tablets (phenylpropanolamine hydrochloride), marketed by the Drug Research Corporation as a 'reducing pill', on charges of misbranding. In depositions by two doctors who had 'tested' the drug it was revealed that the results were complete fabrications. For instance one doctor reported that her report was untrue in its entirely—57 of her 75 patients' charts were complete fabrications and of the remainder only the patients' initials and starting weights were correct ! (Mintz, 1967).

Two investigators in drug testing Dr. Bennett Robin, who had tested 45 products for 22 reputable pharmaceutical companies and Dr. Leo Cass, director of Havard Law School Health Services, who had undertaken 84 research projects for testing and 25 projects for product marketing applications were identified for scrutiny by the FDA. It was revealed that a substantial proportion of the 'testing' was *'graphited'*, that is, by invention of pencil, rather than by actual testing. The FDA revealed that many of the patients on whom 'tests' were done had been deceased earlier or were never hospitalised and treated. Also, for those who were treated the statements made, including claims that treated patients had certain medical conditions, were untrue. This was in the early sixties.

Even in the late 'seventies, after substantial tightening of regulations and monitoring by FDA, graphiting and distortion of results in drug testing were rampant. Between 1977 and 1980 FDA discovered at least 62 doctors who had submitted, manipulated or downright falsified clinical data. Add to this the fact that most fraud in clinical trials is unlikely to even be detected; most cases which come to public attention only do so because of extraordinary carelessness by the criminal physician.

The 1978 hearings of the Kennedy Sub-Committee on Health has catalogued a list of abuses which are still of major concern : (1) Case reports on fictitious subjects, and on subjects who were never administered the investigational drug; (2) Case reports containing the results of clinical laboratory work which was not actually performed; (3) False representation of Institutional Review Board approval of a study; (4) Misrepresentation of patient dagnosis and demographic data; (5) Consent (informed consent) of the clinical subject not obtained; (6) Drug doses given, farexceeding protocol limitations. (7) Drugs given to inappropriate subjects (especially pregnant women); (8) Serial use of investigational drugs to the exclusion of accepted therapy; (9) Administration to subjects of two or more investigational drugs at the same time and the administration of other significant and perhaps interfering drugs with the investigational drug ; (10) Inadequate medical attention to the test population through excessive delegation of authority, lack of follow-up; and (11) Representation of investigational drugs as marketed products and/or the sale of such drugs.

This (researcher dishonesty) is indeed an alarming situation but worse still is the situation in third world countries where consumer protection is almost totally absent. Drug companies opt to test particularly dangerous drugs in the third world because poor people are regarded as more dispensable, and in some measure this is undoubtedly true, concludes Braithwaite. But there are also other more practical reasons for going to the third world first with drugs for which fears of side-effects are great. *Peasants do no not sue global corporations for injury. Informed consent regulations for drug testing do not exist in the third world.* Moreover, given that the patent life of a new discovery is finite, and that monopoly profits will only accrue while the patent lives, there are incentives for companies to get a product registered wherever they can as early as they can. And if the product is found to be unsafe by subsequent, more sophisticated, testing in a developed country, then at least the company has made some money in the third world while the going was good.

Unsafe Manufacturing Practices

Pharmaceutical transnationals have a high reputation, especially in the third world, as regards their product quality and manufacturing practices. But Braithwaite cites a number of cases even within developed countries to prove that this is not wholly true. Yes, it is a fact that manufacturing practices of TNCs are relatively superior to those of other industries but in the third world their standards are very lax in part due to lack of well-defined standard codes in most of the third world.

Many countries have legislations pertaining to quality control such as Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP) and Standard Operating Procedures (SOPs) but the legislations provide adequate loopholes, and monitoring and control is a fairly difficult process and therefore a very constraining task for the state

whose resources are limited. And as one quality control manager put it 'government inspectors ensure the quality of your records, not the quality of your deeds'.

However, there is no doubt that the worst quality standards are in the third world countries where due to limited resources short-cuts are invariably adopted. In the drug industry cutting corners on quality can have very serious consequences for consumers and therefore "bath-tub" manufacturing which is extensively prevalent in the third world, needs greater regulation. In fact, in many third world countries TNCs try to push up quality control - GMP and SOP - Standards because for manufacturers in the third world high quality means cost constraint, which in turn pushes up market prices and in a poor country high priced products could mean loss in market share. Higher quality standards puts the TNCs, who have virtual monopoly of high quality technology, in a domineering position, as well as assures them of a relatively competition-free market.

Drug Peddling

Most countries have restrictions about what claims are made about the products efficacy and use as well as regulations pertaining to Indications about side-effects about the drugs, and its contra-indications. However, as in the case of other areas the scope of malpractice in advertising is also greater in the third world revealing once more the double standards of the drug TNCs. The cost of promotion and consequences of criminal malpractices therein are ultimately borne by consumers. The UNCTC (1979) indicates that approximately 20 percent of all drug sales at the manufacturer's level goes for promotion. In the US the drug industry is easily at the top of league of the heaviest advertisers, with the soap and detergent industry its only close rival; even tobacco, alcohol, food and soft drinks lag well behind (Haslemere Group).

In the third world the expenditure is estimated to be even higher. In Columbia the money spent each year by foreign companies on marketing their drugs adds up to more than half the country's national health budget (Braun, 1980). The Concentration of sales representatives to doctors in the third world is much greater than in developed countries. In Britain, there is one medical representative for 18 doctors, whereas in Bangladesh the ratio is 1:7; in Tanzania 1:4; in Nepal, Brazil and Central American countries 1:3 (Melrose, 1982).

The Kennedy Senate hearings have documented gifts to doctors of freezers, tape recorders, stethoscopes, golf balls with Pfizer stamped on them; indeed, almost every type of consumer product imaginable. Further, in 1973, 20 drug companies in the USA gave 12.8 million gifts to members of health care profession and over two billion samples of free drugs. Drugs companies have provided free to 80,000 doctors in 35 cities F M radio sets tuned to the Physicians Radio Network that constantly churns out medical news and features of interest to physicians.

The major consequence of such heavy promotion of drugs is that where people have access to drugs there occurs a substantial amount of over-medication, especially of the non-prescription drugs that 'ease our ailing heads, noses, chests and bowels' giving us 'fast action and rapid relief'.

Oligopoly and Price Fixing

High profitability is the lifeline of the drug industry, contrary to what OPPI and IDMA would like us to believe. Since World War II pharmaceuticals has been the most profitable business. The UNCTC observes that from 1953 to 1967 in the US, the equity capital in drugs increased 584 Percent whereas for the entire manufacturing industry the increase was only 183 Percent in the same period. Most American companies have been recording on an average, net profit between 30 percent and 40 percent a year; SKF, Carter-Wallace, and Rohrer between 40 and 47 percent; Syntex, A.H. Robins and Marion Laboratories over 50 percent and Upjohn even during the depression between 1930-35 recorded an average of 30 percent.

Braithwaite rightly argues that excessive profits in the pharmaceutical industry arise in considerable measure from the peculiar features of the market which shelter producers from price competition. Consumer sovereignty is absent in the prescription drug market because it is not the consumer who makes a decision to purchase, but the physician. Doctors have no reason to be price-conscious. Moreover, the need for effective medical care is relatively price inelastic in affluent societies.

The Kefauver hearings before the US Senate Sub-Committee on Anti-trust and Monopoly (1977) found that the average production costs for 15 major drug firms were 32.3 percent of the wholesale price at which the manufacturers sold their product. Not one of the 50 companies compared

from other industries had production costs lower than the highest production costs among the 15 drug companies; only Coca-Cola came somewhere near with a production cost of 42.6 percent of ex-manufacturer sales.

Besides the drug market structure, the legal back-up of patent holding for 16-17 years makes the pharmaceutical industry oligopolistic. Patent-holding alongwith branding gives the pioneering company an advantage because the brand name becomes a habit and late-entrants to the market find it difficult to break the original brand's monopoly of the drug market. Thus the higher price of the brand-leader is no threat to its market share. As a result fortunes have been made because of patenting and branding, and quite often through direct oligopolistic deals as happened in the case of tetracycline, quoted at length by Braithwaite.

Pfizer and Cyanamid were dominating the broad spectrum antibiotics market till 1953 with their patents on chlorotetroncycline and oxytetracycline. This patent protection helped them maintain high prices and massive profits. But in 1953 when the therapeutically superior tetracycline came on to the scene their profits were threatened. Both the firms wished to avoid this competitive market structure and therefore manoeuvred a deal that managed to restrict tetracycline sales to five firms-Pfizer, Cyanamid, Bristol, Squibb and Upjohn — all of whom recognised Pfizer as the patent holder.

Thus price-fixing was inevitable. Keauver's investigations revealed a conspiracy that was in violation of the Anti-trust law of USA (The first charge was made in 1958 by the Federal Trade Commission). A long drawn out legal battle began which acquired an international dimension (including India). The various civil cases are still going on but criminal charges have been inconclusive. So far damage worth 250 million dollars have been paid by companies — the US government itself is claiming overcharges of 376.5 million dollars.

However such price-fixing conspiracies are not possible today because all governments (USA being the only exception) have a price control policy. Of course, this is no guarantee that the pharmaceutical TNC's will not club together to influence what to their understanding is a fair price. Oligopoly has become the basic operating principle in the pharmaceutical industry. The most classic instance, ironically, being free enterprise USA itself. Inspite of the Anti-trust Law five massive mergers of pharmaceutical TNC's have taken place in the last decade or so: Mead Johnson and Bristol Myers; Plough and Schering; Ciba and Geigy; Parke Davis and Warner-Lambert; Dow and Richardson-Merrell.

Then, as the markets and courts have failed to regulate pharmaceutical prices effectively, and since self-regulation of pricing would be to put Dracula in charge of the blood bank, the only course, argues Braithwaite, is for greater political administrative price control.

Financial Fiddling

Financial abuse is an area of crime that probably has the worst consequences for the third world nations. Other areas of crime discussed earlier affect health of consumers directly as individuals or may be even as a class but financial fiddling can cause irreparable damage to a third world nations' economy.

For instance, a large proportion of transaction on the books of an international company, writes Braithwaite, are sales from parent to subsidiary, subsidiary to parent, or one subsidiary to another. Intracompany *transfer prices* can effectively shift profits from one part of the world to another. For example, drugs might be shipped from a high-tax country to a low-tax country at below market prices in order to shift profits to where they will attract least tax. Transfer pricing is therefore a classic law evasion strategy. Tax laws of the high-tax country are not violated, they are evaded. In one celebrated case vitamins were manufactured in France at a cost of Fr. 50 per kilo, exported to West Germany, from there sent to Switzerland, thence Monaco, and eventually reimported to France at Fr. 250 per kilo under a different trade name. It sometimes happens with such cases (especially in the third word) that shunting around the circuit happens only on paper without the corresponding physical movement of materials.

The most important tax heaven in the pharmaceutical industry is Puerto Rico. A large proportion of transactions between the USA and other parts of the world, comments Braithwaite, go through Puerto Rico. Wall street analyst John Buttles II calculates that Warner-Lambert had a 110 percent return on its investment in Puerto Rico plant and equipment in 1976. For Abbot the figure was 101 percent while for Schering it was a meagre 90 percent. In 1977, Schering recorded 59.2 percent of its world-wide profits in Puerto Rico; Squibb 53·7

percent; Abbot 48.4 percent; Smithkline 45.7 percent. But Searle outdid everyone: while Searle's worldwide operations in 1976 and 1977 ran at a loss (at least were shown as so) its Puerto Rico subsidiary recorded over 100 percent of its worldwide profits.

A study of third world countries shows that pharmaceutical imports into Columbia by foreign owned companies were overpriced by 155 percent, very much higher than the overpricing of other imports. Vaitsos estimates that if Columbia had been paying average world prices for its pharmaceutical imports, the country would have saved a charge of 20 million dollers to the Columbian balance of payment in 1968. Approximately half of 20 million dollars in excess profits repatriated by transfer pricing would have gone to the Columbian government in taxes (Vaitsos, 1974).

Besides fiddling books, repatriation of profits from third world countries can be achieved by fiddling packages. A European transnational was found to be importing into South America sealed packages of drugs which contained less than 30 percent of the declared contents. By paying 100 percent of the declared cost to the patent company (through a tax haven) the subsidiary was able to transfer 300 percent increased profits to the parent.

There are many reasons apart from evading tax, indicates Braithwaite, for a parent to charge high prices for intracompany sales to an affiliate, and low prices for sales from affiliate to parent. It might be done to circumvent dividend repatriation restrictions, reduce the affiliate's exposure to currency devaluation and expropriation risks, lower apparent profits when excessive profits might encourage labour unions to escalate wage demands and local customers (and governments) to demand price reductions, or simply to allocate markets by making the exports of a subsidiary noncompetitive.

Thus, if the control and domination of the drug TNCs has to be broken, their abuse of human health eliminated and their crimes in the manufacture and marketing of health terminated, the fight necessarily must be a political one and not one of improving the market and legal situations as most countries are resorting to today. The TNC power is derived from their ability to control and manipulate political affairs of both developed and developing countries. Only a manifestation of power of an equal force can offest the drug TNC's choking hold over people's health and well being.

Case Studies

(1) Richardson-Merrell : In 1960, a subsidiary in the USA began the marketing of a blood-cholestrol reducing drug, MER/29 (triparanol). In its first 12 months 300,000 Americans used MER/29. Soon reports flooded the market about its side-effects - baldness, skin damage, changes in reproductive organs and blood and serious eye damage including cataracts. It was later revealed that the drug had problems in the testing stage. On grounds of integrity, Mrs. Benhah Jordan had quit Merrell. There was gross manipulation of data in the animal testing (monkeys) programme and gross misreporting of facts to FDA, inspite of the fact that comparative studies by Merck and Upjohn had reported severe side effects. Even in the human testing stage doctors reported severe side-effects but Merrell chose to ignore them and fabricated the data for FDA approval. It was also revealed that the supervisor on the project 'Dr' William King had not yet been awarded his medical degree! In the criminal case that followed the defendants pleaded 'no contest' and after six month's probation and a paltry fine (dollars 80,000) the three exceutives were let free. In civil suits that followed Richardson-Merrell paid 200 million dollars, mostly in out-of-court settlements.

(2) Dawes Laboratories : In 1971, many workers complained of sexual impotence — some men had developed enlarged breasts, in one case requiring surgical removal. Plant conditions were bad - ventilation was practically non-existent and the whole interior of the plant was covered with dust containing as high as 10 percent DES (a hormonal product) by weight. An enquiry by OSHA resulted in a fine of only 21000 dollars.

(3) Hoffman-La Roche : In a patent hearing in Canada it was revealed that the wholesale price of Valium is 25 times that of gold. It costs dollars 87 per kilo for the raw matrial for Valium (diazepam). To put the raw material into final dosage form and to label and package the tablets brings the cost upto dollers 487 (high estimate). The final retail price is dollars 11000 for that same original kilo which has now produced 100000 ten milligram tablets. The selling price is 140 times the original cost of materials and twenty times the total production cost. Roche sales of Valium in the USA alone in 1972 was worth 200 million dollars. Roche sells Valium in Germany at four times its price in Britain (both belong to EEC). In Sri Lanka Valium was quoted by Roche to the government as 70 times the price charged by an Indian company.

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In Britain, Roche was sued for abusing monopoly power by its pricing of Valium and Librium. In out-of-court negotiations in 1975 Roche agreed to pay 3.7 million dollars for over-pricing their product in the previous live years and also agreed to reduce the price at half the level of 1970. The importance of this case was that it focussed international attention on overpricing and anticartel suits followed in various countries.

(4) Upjohn and A. H. Robins : Upjohn's Depo-Provera, an injectable contraceptive for women, was found through early American research to be associated with such a welter of side-effects that the FDA has not only indicated that the product is not approvable in the US, but has forbidden human testing of the drug in the US. But huge quantities are being dumped on the third world. Throughout Central America one can walk into a pharmacy and purchase Depo Provera without a prescription. Earlier even most of the testing of the drug was done in third world countries like Brazil, Thailand, Chile, Philippines, Sri Lanka, Hong Kong, Egypt, Honduras, Peru, Mexico and Pakistan. "When research into its possible effect on the weight and blood pressure of women taking the injections was carried out in South Africa, the researchers saw fit to examine these features by experimenting with Negro (75 percent) and Asiatic (25 percent) women, rather than on women with the same coloured skin as the researchers".

Similarly A.H. Robins has dumped Dalkon Shields, an IUD, in some 40 third world countries. It was recalled from the American market after 17 women were killed. In an enquiry later it was revealed that in the teststage physicians had reported unfavourable effects like uterine perforation and ectopic pregnancies.

The staggering thing about the dumping in the third world in this case has been the involvement of the US government's office of Population with the AID. USAID purchased the contraceptive device at discount rates for assistance to developing countries after the product was banned in the US. Double standard for third world consumers were even more remarkable when Robins sold USAID unsterilised shields in bulk packages at a 48 percent discount. USAID justifies the discount Dalkon dump on the grounds of getting more contraception for the dollar.

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