

'GENERIC'S' POLICY & DRUGS

I—Approach to implementation

By P. K. Ghosh

The issue of substitution of 'brand' names by 'generic' names is one which for many years is active in the national and international pharmaceutical politics.

Many countries like India in the developing world have tried to create a workable 'generic's' policy to generate a perpetual 'generic's' market through government action. However, such attempts have not yet been generally successful in the entire spectrum of pharmaceuticals business in any country. It has, however, shown some consumer acceptance in certain range of products and that too, the nature of products have varied from country to country. In India in particular, while the 'generic's' concept is still at a very low key, it has emerged in some way in certain areas of pharmaceutical business as discussed later on.

The 'generic's' issue was studied for the first time by the "committee on Drugs & Pharmaceuticals Industry" (Hathi committee) at some length during 1974-75. The committee broadly concluded that (i) brand names lead to high promotional costs and consequently high prices of formulations; (ii) medical students generally receive their education on drugs under the generic names and therefore, 'generic's' prescription should be preferred.

The committee made several recommendations, important among them being (i) brand names for drugs, marketed in India, should be abolished in a phased manner, and a beginning of generic names may be made by starting with the drugs identified by the committee; (ii) new drugs, first introduced into the country, should not be allowed to be marketed under brand names.

The new drugs policy statement of March 1978 of the government on brand names embodies specifically the above recommendations, with some modifications, in the policy paragraphs 71.1 to 71.6 and 99 and 100 (Annexure-I). In line with the policy, the ministry of commerce and civil supplies has instructed the registrar of trade marks (effective from 16.3.79) not to register any trade mark for new single ingredient formulation when introduced for the first time in India for consumption within the country. The ministry of health and family welfare, by a notification dated 17-1-1981, amended rule 96 of the Drugs & Cosmetics Rules, 1945, so as to implement the embodiment of drug policy in respect of brand names (Annexure-II). The ministry of industry is not allowing the incorporation of any brand names for any drug (bulk as well as formulation) in licences issued under I (D & R) Act in accordance with the new drug policy. All these government actions are set out to distinctly implement the embodiment of the new drug policy. The success or otherwise of the 'generic' policy is a matter which only the future will decide.

In order to understand the various aspects of the 'generic's' vs. brand names issues, the important factors which go into the system have to be clearly understood so as to appreciate the various aspects of the problem. Generally three main segments, namely, the regulators (the government), the industry (manufacturers) and the users (doctors, chemists and consumers) have to be understood at great length in order to predict if the 'generic's' policy would be useful and meaningful in the long run. The basic driving force of the regulators to implement the 'gene-

rics, policy arises out of the decision taken in Parliament in March, 1978. As mentioned above, the government in its various facets from the ministry of chemicals and fertilisers, health, commerce, industry and the state governments, have been trying in various ways to implement the 'generic's' policy to its maximum level.

It is generally believed, that marketing in generic names requires less of marketing expenditure and, therefore, such products could be marketed at a cheaper price. Although the Drugs Price Control Order, 1979 is supposed to even out the selling price of equivalent formulations, the process could only fix the maximum allowable limits of selling, while the marketers of the branded products generally take advantage of the limit usually up to the maximum level, the marketers of the 'generic's' do not take the full advantage which ultimately results in the appearance of cheaper 'generic' products.

'Generic's' are believed to be therapeutically equally effective when compared with equivalent branded products. Although government has not adopted any specific measures for assuring the

quality of the 'generic's' in particular, the state drug control administration in every state is vigilant and is constantly examining the quality of every pharmaceutical product manufactured in the state.

Certain companies, particularly belonging to the multinational group, have specialised marketing techniques. The corporate objects of such companies are to maximise their profits by every means. Therefore, irrespective of whether the products they market are superior in quality or not, they adopt various tempting methods and sophisticated selling techniques, including claims of superior bio-availability, minimum bacterial count on products, etc.

While such scientific means as the bio-availability, minimum bacterial count etc. have their importance in certain range of products, they are by no means parameters for generalisation for every range of marketed products. In the process, the real worth of the product gets suppressed before the strong tempo of such selling methods and in effect the prescribers and the users get carried away and form opinion of superiority of such pushed products only. Such impression of superiority of certain product gets propagated through the users/prescribers. While such a situation is beneficial to the few companies, which market them, it is not beneficial to the country as a whole, since the process pushes back the concept of equitable distribution status to equivalent products.

The driving force for such marketing efforts could be greatly reduced by disapproving brand names. All the marketing techniques concentrate upon creating an image of the 'brand' name before the prescribers/users. In the absence of a brand name, the marketing efforts of a company get greatly diluted before the prescribers/users, since the latter knows the product by one name only, being the generic name and, therefore, he is more aware of the product.

This results in minimising the impact of diverse marketing techniques on him.

It appears that the government is concerned on the large number and the diverse composition of formulations marketed, a substantial portion of which is considered irrational and is not commensurate with prescribed dosage requirements. The driving force in the introduction of odd packs arose because of various reasons, important among them could be adoption of newer selling methods, better profitability, expectations etc. In the process, the market got flooded with unmanageably large number of packs in almost equal number of diverse brand names. According to one estimate the current number of packs in the market exceeds 20,000 numbers.

It may be worth remembering that the number of active ingredients (bulk drugs) used is of the order of 400 only. Ideally, therefore, the most effective single ingredient medicines formulated out of such drugs could be equal to this. Since, however, the manner of incorporation of a drug varies, e.g., oral solids (in the form of tablets, capsules, granules, powders, etc.), liquids (syrups, elixirs, tinctures, etc.), injectables (intra-muscular as well as intra-venous), sprays like aerosols etc. besides varia-

tions in dosage administration for children and adults, etc., the number of single ingredient formulations foregoing marketing rights in favour of more efficient formulations etc. are more important ones. All these factors except the last one could be brought together with a common denominator if brand names are sacrificed in favour of the generic names. The manufacturers who market their products in brand names believe that they set standards for their products which are higher than the minimum required by law. According to them compulsory generic prescription will strangle the manufacturers' incentive to achieve product excellence and quality standards above the minimum legal requirements. They believe that manufacturers who basically compete on price alone, may not be in a position to maintain high standards. They also believe that no regulatory machinery (like the government) can assure quality, safety and therapeutic efficacy of all generic drugs.

The industry also feels that by allowing the usage of brand names the pharmaceutical products are made to carry the manufacturers' assurance of quality and reliability.

The manufacturers believe that the users of the product do not only purchase a drug but also an element of trust which is generated by the manufacturer, through the assurance of quality over the years.

The manufacturers are also of the opinion that since brand name exists in every other industry, there is enough ground that the same should exist in the pharmaceutical industry as well. The manufacturers also feel that patients will not get drugs of appropriate quality if brand names are abolished. According to them, an introduction of formulations in generic names may lead to introduction of sub-standard drugs.

They also feel that the patients will be at the mercy of the chemist/pharmacist since the latter is free to supply equivalent 'generic' drugs. The industry feels that if the chemist is unscrupulous, he may be tempted to offer the

drug of a manufacturer, who gives him the highest margin of discount.

The industry feels that under 'generic' prescription, it is difficult to fix the responsibility on the manufacturer for the damage done to the patients by consuming a generic drug, as it is impossible to identify the manufacturer. Also a new drug is usually not discovered out of accident today but out of sustained research. The research and development (R & D) expenditure on drug in developed countries in certain companies is enormously high and the manufacturers are not willing to carry out research on products until they are assured that the money so spent is recoverable through the introduction of effective drugs whenever discovered.

These organisations feel that out of various ways of protecting the proprietary right of the products so introduced by them, a permission to allow the introduction of the product in brand name is one. Restriction or denial to marketing such research products in brand names would hinder the entrance of such effective drugs into our country for quite some time. Such drugs might come to the country very late only at a time when much more efficacious drugs have already been discovered elsewhere.

The customers of the pharmaceuticals industry include the prescribing physicians, the chemists/pharmacists and the ultimate users of the medicines. The users are either individuals or organised purchasers like the government or the private organisations.

The well-to-do physicians tend to oppose shared decision-making. Even in prescribing most of them use such scripts which are even illegible to men of immense knowledge in medicine. It would not be wrong to say that physicians would usually be conservative in their approach to the issue of any drastic change in the present system where their authority is going to be weakened.

In so far as the chemists/pharmacists are concerned, they have so far played a very minor role in the choice of the medicines for the patient. Practically the only role these professional groups play is to advise the ultimate consumer on over-the-counter medication on request. Even here they are not fully free to do so for the threat of being prosecuted for practising medicine.

The individual customer is a vast section of people, with vast knowledge but with no education. Unfortunately the latter part being predominantly large, no useful response is expected from the mass in general. Very small section of the population, having above-average education, are, however, usually quite open to accepting 'generic' prescription. Besides, those persons who are on long term maintenance therapy and who pay for their drugs may also support the 'gene-

rics' prescription since these are going to cost less. However, at present, the degree of acceptance of 'generics' among the individual consumers is difficult to assess. A nation-wide sample survey could only bring out some status on the issue. The customers belonging to the group of organised purchasers like the government, who are always constrained to reduce the cost of health care system, having regard to the limited availability of resources, cannot but consider the 'generics' as an important means to reduce the cost of drugs required for maintaining the public health since purchase

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under 'generics' are normally cheaper. Although we do not have data to substantiate this, analysis of the purchases made by various government organisations like the D.G.S. & D., the state health departments, various municipal corporations etc. during the last five years would certainly prove the point.

The semi-private and the private customers belonging to the group of organised purchasers including those who support medicare reimbursement like the various public sector undertakings, the nationalised banks, the State Trading Corporation, the Indian Airlines etc. as well as the other purely private group of people like the executives in the various industries and private institutions etc. have not come forward to support the 'generics' policy. In their system practised in the reimbursement scheme, the authorised physicians usually play the pivotal role in choosing the medicine for their clients.

Such authorised physicians are usually greatly influenced by the large companies in their prescribing habits. These large companies are in the habit of promoting products in the brand names. The wishes of these influential companies end up in the consumption of branded products rather than the 'generics' through the prescription of such authorised physicians and in the process almost no support is derived from this important section of customers for the 'generic' drugs to move and get promoted.

ANNEXURE: I (Government policy on Brand Names)

(The government's policy on brand names is embodied in paragraphs 71.1 to 71.6 and 99 to 100 of the drug policy statement of March, 1978 which are reproduced below:

71.1 Brand names shall be abolished in the first instance in respect of the following five drugs: Analgin, Aspirin, Chlorpromazine, Piperazine and its salts such as Adipate Citrate and Phosphate, and Ferrous Sulfate.

71.2 All single ingredient dosage forms of these drugs shall be marketed only under generic names.

71.3 Drugs which are to be exported will be allowed to bear brand names.

71.4 This decision will be kept under constant review in the light of actual experience.

71.5 Drugs formulations marketed under generic names will also be subject to price control.

71.6 Such amendments as might be necessary would be carried out immediately in the relevant Acts like the Trade and Merchandise Act 1958 and Drugs and Cosmetics Acts/Rules.

99 All single ingredient drugs and drugs included in the Indian pharmacopoea other than those in respect of which brand names have been abolished shall bear labels displaying prominently the generic names. Brand names may be shown on labels in a less conspicuous manner.

100 Drugs controller should not, while granting permission, give recognition to brand names of new single ingredient drugs, nor should such drugs be allowed to be marketed under brand names when first introduced into this country.

ANNEXURE: II

(Extract from the Gazette of India, Part II-section 3-sub-section (1) Appearing on pages 47-48, department of health, New Delhi, the 17th January, 1981):

"GSR 27(B). — Whereas certain draft rules further to amend the Drugs and Cosmetics Rules, 1945, were published, as required by sections 12 and 33 of the Drugs and Cosmetics Act, 1940. (23 of 1940), at pages 347 and 1864 of the Gazette of India, Part II, Section 3, Sub-section (i), dated the 23rd February, 1980 and the 16th August, 1980 respectively, under the notifications of the Government of India in the Ministry of Health and Family Welfare (Department of Health), Nos. GSR 216, dated the 8th February, 1980 and GSR 864, dated the 8th August, 1980

respectively, inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of ninety days from the date on which the copies of the Official Gazette containing the said respective notifications were made available to the public:

And whereas the said Gazette were made available to the public on the 10th March, 1980 and the 30th August, 1980 respectively; and whereas the objections and suggestions received from the public on the said draft rules have been considered by the Central government;

Now, therefore, in exercise of the powers conferred by sections 12 and 33 of the said Act, the Central government, after consultation with the Drugs Technical Advisory Board, here-

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by makes the following rules further to amend the Drugs and Cosmetics Rules, 1945, namely:

1. (1) These rules may be called the Drugs and Cosmetics (Amendment) Rules, 1980.

(2) Rule 2(b), rule 2(c), in so far as it relate to the provision of "preparations containing any drug specified in Schedule W as the single active ingredient", and rule 3, shall come into force on the 1st day of August, 1981, and the remaining provisions of these rules shall come into force on the date of their publication in Official Gazette.

2. In the Drugs and Cosmetics Rules, 1945 (hereinafter referred to as the said rules), in rule 96, in sub-rule (1), in clause (i), (a) for the words "for this purpose", the brackets letter and words (a) For this purpose, "shall be substituted; (b) for the words "the proper name of the drug shall be given in an equally conspicuous manner as the trade name, if any, and shall be", the words "the proper name of the drug shall be printed or written in a more conspicuous manner than the trade name, if any, which shall be shown immediately after or under the proper name and shall be" substituted;

(c) after sub-clause (A) as so numbered, the following sub-clause shall be inserted, namely:

"(B) The following preparations shall be labelled only with proper name of the drug and not with any trade name:

(i) Preparations containing any new drug as the single active ingredient and approved under rule 30A, 69B or 75B by the licensing authority subject to the condition that such preparations should be marketed under a generic name only.

(ii) Preparations containing any drug specified in Schedule W as the single active ingredient."

3. In the said rules, after Schedule V, the following Schedule shall be inserted, namely:

SCHEDULE W

(See rule 96(i) (i) (B))

Name of the drug which shall be marketed under generic names only:

1. Analgin, 2. Aspirin and its salts, 3. Chlorpromazine and its salts, 4. Ferrous Sulphate, and 5. Piperazine and its salts.

(TO BE CONCLUDED)

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II—Compensation for R & D

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The claim of the industry that they set standards for their branded products higher than the minimum required by law is not always true. Usually the knowledge on various aspects including the manufacturing technique, the bio-availability, etc. for various drugs (formulations) discovered long ago and introduced into the country for more than 20 years is not a secret and it becomes almost a common knowledge to people in the business.

For such drugs, the claim of the company to have set standards higher than the minimum, required by law, is rather exaggerated. Wherever a drug appears in the pharmacopoeia, it is usually believed that adequate knowledge on the drug has already been gathered and, therefore, there is nothing very special which any manufacturer can claim for such drugs.

On the contention of the industry that introduction of brand names would lead to the induction of sub-standard, and spurious drugs in the market it may be stated that the Hathi committee, in its report, had stated that "there have been no instances where a product marketed under generic name has ever been reported to be spurious." The committee concluded that "branding of products promotes a tendency to prepare misbranded or spurious products."

The fear of the industry that the patients would be at the mercy of the chemists/pharmacists rather than on the supervision of the prescribing doctors, if the prescription is in terms of a generic product, seems to be stretching the issue far beyond relevance since it could also be argued that the ethics of every prescribing doctor might not be of equal standard and, therefore, the fear that a qualified chemist/pharmacist would act less responsibly to a prescription does not seem to be tenable.

There is however, a strong point in favour of the industry when they are arguing for the right of introducing brand names for products discovered for the first time in India or abroad, and which are introduced for the first time in India. It is believed that each discovery has a backing of a culture of substantial R & D efforts in terms of manpower and money which every company cannot afford. There has, therefore, to be a method of adequate compensation for R & D efforts and, therefore, recognition of brand names for such new products for some minimum period should be allowed, since this is, also considered to be a method of compensation.

As mentioned earlier, there appears to be a belief among the regulators that 'generic' products are comparatively cheaper. In order to ascertain the facts, data were collected on the selling prices of important drugs including antibiotics, analgesics, steroids, anti-T.B. drugs and anti-dysentery drugs which were sold in generics as well as in brand names (annexure-III), from among the leading producers. It was found that by and large generics were cheaper than the equivalent branded products.

The regulators are committed to implementing the generic policy as embodied in the new drug policy, 1978. The multipronged efforts of the regulators have resulted in effecting a small go for the 'generics' in certain areas. Annexure-IV shows the trade attainment of a few products marketed in generic names by reputed manufacturers. It would be of interest to note that the market of most of such products is on the increase.

The data in annexure IV reveals that the drugs which are being marketed under generic names and which are having substantial sales are insulin, tetracycline, oxytetracycline, benzyl penicillin, Benzathine Penicillin, Sulfadimidine, suaguanidine,

Sulfadiazine, A.P.C., Analgin, Prednisolone etc. Almost all such drugs are in use in the country for more than 20 years and are considered to be comparatively old ones. Relatively new drugs have, not shown much impact in the trade sales in 'generic' names.

Although certain formulations marketed under 'generics' have shown progress, the overall picture of the trade sales compared to total trade sales of 'generics' is still at a low profile. Roughly the trade sales of 'generics' during 1978-79 (Sept.-Aug.) constituted nearly 1.7 per cent of the total (trade sales), while during the following year (Sept., '79-Aug., '80) it increased to about 1.9 per cent.

There are at present 137 companies in the organised sector and about 3,000 companies in the small scale sector. The sales turnover of formulations marketed by these companies during 1979-80 amounted to Rs. 1,150 crores. While all these companies contributed in their own way in the selling of drugs, a few of the order of 120 to 150 were really more important in terms of their market share in the overall business.

A private organisation conducts a monthly survey of trade sales of 150 important companies. Their report for the month of August, 1980 indicates the annual trade sale-value at Rs. 607.80 crores (Sep., '79 to Aug. '80). The first 30 companies accounted for about 66.4 per cent of the total trade sales. Since these companies contributed substantially to the market share it was considered necessary to examine if such companies marketed any 'generic' product. Answer to this question was important since this would directly make us believe whether or not companies having substantial hold in the market had accepted the concept of 'generic' marketing.

It was revealed that, of these 30 companies, only 12 had at least one generic product in their price list. The remaining companies had no generic product at all in their price list. This clearly indicates that the willingness of the large companies to participate in the 'generics' business, has not been universal. Some means must have to be found out to attract all the major producers of pharmaceutical products to come forward to take part in the 'generics' business if the 'generics' policy is required to reach the take off stage very fast.

The sale of formulations to the various institutions during the last two years is estimated at about Rs. 220-250 crores annually, a substantial portion of which is believed to be sold in 'generics'. Institutional sales is highly competitive and is not much influenced by the opinion of the prescribing doctors. Sale of 'generics' attract an excise duty of 2 per cent while the branded products attract 7-1/2 per cent. This is a major disincentive to the sale of branded products but an incentive to the 'generics' which, therefore, helps the latter to win over the former in competition in institutional sales, where the other forces of market competition freely operate.

In order to take advantage of the support of the customers specially the doctors in 'generics' prescription usage it would be more appropriate to approach the younger generation of the medical practitioners and also the socially conscious ones, who would better appreciate the advantages and the benefits of the 'generics', compared to the branded products. It is to be understood that the large companies, which are very influential in orienting the prescribing behaviours of the physicians, would do so more among the aged and the well-to-do ones.

The younger generation is always opposed to traditional feeling of the

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social responsibility, is traditionally more dormant among the younger generation. In the implementation of the 'generics' policy, therefore, this important section of the physicians has to be kept in mind. The customers in the form of chemists/pharmacists have also to be given greater freedom so that they put to use their accumulated knowledge acquired in the preparation for the profession. However, great care has to be taken to see that such extension of freedom is restricted to professionally qualified chemists/pharmacists.

Many countries like ours had experimented in evolving a working 'generics' policy. It is understood that most of such efforts have not brought any significant results in almost any country except in the U.S.A. It is understood that the 'generics' sale is emerging as an important event in the U.S.A. market. Although quantifiable data are not available to appreciate the impact, it is a matter of great satisfaction to those who believe that drug sales in 'generics' is going to be a tool for standardisation in the dosage, package and presentation, the systematisation of which will lead to the availability of cheaper but effective drugs to the customer.

In view of the above the following conclusions are apparent:

The concept of 'generics' marketing has not yet been universally accepted among the leading manufacturers in the country. Without their active participation in the concept, there is not going to be much progress in the matter.

Although generic drugs are cheaper, they have not yet made substantial impact in the trade sales. Therefore, any drastic measure on the part of regulators to forcibly direct the manufacturers to participate in the concept might not prove effective in the long run. Since there is an element of obsolescence in drug industry, it could be useful to impose restrictions on the introduction of or the marketing of single ingredient formulations based on drugs in use in our country for a long time, say more than 30 years. Marketers could be asked to change over to the generic names for such single ingredient formulations in a phased manner since adequate returns from such products are believed to have already been realised by the marketers.

At the moment there is no special concession to marketing 'generics' except that the 'generics' attract an excise duty of 2 per cent, while the branded products attract 7-1/2 per cent. More incentives to 'generics' marketing or disincentives to brand marketing have to be thought of if the 'generics' policy is required to be implemented.

A stumbling block to the acceptance of generic drugs is that a large section of the population believes that in these drugs prescribed quality standards are not always maintained. No matter what the enforcement authorities might think in the issue, it is universally accepted that no government control can assure adequate quality standards for any product marketed.

Traditionally the corporate object as well as the well-established culture of the manufacturers have to be relied upon in the matter. It is a fact that large companies having established reputation, never play with the quality of the product they market. It is, therefore, of prime importance that besides strengthening the enforcement authorities in ensuring the quality standards of the products marketed, ways and means are to be evolved to make the reputed manufacturers actively participate in the 'generics' policy of the government.

Selling of drugs in the trade is one important area of specialisation which every company cannot master. Drugs Industry being the one directly responsible for the health care of the society, the normal marketing force of competition may not be deliberately allowed to play a role in certain areas where mass consumption is contemplated. Drugs such as those which have been re-

served for production in the public sector units only are items of mass consumption. Usually other manufacturers are not interested to invest in such items primarily because these are low profit earning items requiring substantial investment.

Public sector units being under full control of the government, it is easy to direct them to market generic products. Also one thing non-controversial about the public sector units (PSU's) is that the public in general believes that the PSU's never compromise with quality. One major problem, also universally accepted for the PSU's seems to be that they are poor marketers. Government could do a great service to nation if the reservation policy adopted in the manufacture of bulk drugs could also be enforced to cover formulations based on such reserved bulk drugs. Such reservation would eliminate the scope of competition and, therefore, the difficulties in the marketability of such products would vanish in a moment. Government could simultaneously instruct marketing of such reserved formulations in 'generic' names only. By this, there could be a substantial gain on the part of the government in achieving two goals. This should, however, be restricted to single ingredient formulations only.

(Concluded)

ANNEXURE III

TABLE
(Comparative Price of Important Products Sold under Generic Name Vs. Brand Name)

Sl. No.	Name of the Bulk Drug	Product Marketed (Name & Composition)	Whether Generic Name or Brand Name	Marketed By	Pack	Price	Price Per Unit (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Tetracycline Hcl.	Tetracycline caps. (250 mg)	Generic	IDPL	10 x 10	47.88	0.479
		Achromycin caps. (250 mg)	Brand	Cyanamid	4	2.32	0.580
		Hocstacycline caps. (250 mg)	Brand	Hoechst	10 x 10	48.80	0.488
2.	Ampicillin Trihydrate	Ampicillin caps. (250 mg)	Generic	Smith	10	9.94	0.994
				Stanistreet			
		Ampillin caps. (250 mg)	Brand	Lyka	16	22.27	1.392
		Roscillin caps. (250 mg)	Brand	Ranbaxy	4	6.30	1.575
3.	Chloramphenicol	Chloramphenicol caps. (250 mg)	Generic	Pharmakab	100	35.00	0.350
		Chloramphenicol tabs. (250 mg)	Generic	Mac Labs.	12	3.53	0.294
		Enteromycetin caps. (250 mg)	Brand	Deys Medical	12	4.21	0.351
		Paraxin caps. (250 mg)	Brand	Boehringer	10	3.50	0.350
				Knoll			
4.	Benzathine Penicillin G.	Chloromycetin caps. (250 mg)	Brand	Parke Davis	12	4.63	0.390
		Benzathine Penicillin G. (6 lacs, 12 lacs, 24 lacs)	Generic	HAL	6 lacs	2.03	2.030
					12 lacs	3.66	3.660
					24 lacs	6.54	6.540
		Penidure — LA 6, LA 12, LA 24 (6 lacs, 12 lacs, 24 lacs)	Brand	John Wyeth	6 lacs	2.17	2.170
					12 lacs	3.80	3.800
					24 lacs	6.70	6.700
5.	Analgin	Analgin tabs. (0.5 gm)	Generic	IDPL	10 x 10	18.27	0.183
		Novalgin tabs. (0.5 gm)	Brand	Hoechst	10 x 10	20.00	0.200
6.	Prednisolone	Prednisolone tabs. (5 mg)	Generic	Deys Medical	10	1.82	0.182
		Wysolone tabs. (5 mg)	Brand	Wyeth Labs.	10	2.15	0.215
7.	I.N.H.	Isoniazid tabs. (100 mg)	Generic	Albert David	1,000	29.74	0.030
		Isoniazid tabs. (100 mg)	Generic	Deys Medical	1,000	29.58	0.030
		Isoniazid tabs. (100 mg)	Generic	Haffkine	1,000	26.62	0.027
		Isonex tabs. (100 mg)	Brand	Pfizer	1,000	30.38	0.031
8.	Iodochlorhydroxyquinoline	Iodochlorhydroxyquin tabs. (250 mg)	Generic	Haffkine	100	7.88	0.079
		Entero-Vioform tabs. (250 mg)	Brand	Ciba-Geigy	50 x 10	42.08	0.084
		Enteroquinol tabs. (250 mg)	Brand	East India	20	1.84	0.090

ANNEXURE IV

(Trade sales of certain important drugs by reputed manufacturers in generic names)

S. No.	Name of the Product	Marketed in Packs of	Sales During		% increase (+) / Decrease (-) During 1979-80 over 1978-79
			Sept. 78- Aug. 79	Sept. 79- Aug. 80	
			Rs. in thousands		
(1)	(2)	(3)	(4)	(5)	(6)
1.	Insulin 40 units	10 ml	8,114	9,422	(+) 16.1
2.	Insulin Protamine Zinc	10 ml	964	1,055	(+) 9.4
3.	Insulin Zinc Suspension	10 ml	9,181	11,065	(+) 20.5
4.	Insulin Isophane	10 ml	1,593	1,804	(+) 13.4
5.	Dextrose Solution 5% (Company A)	540 ml	123	321	(+) 150.8
6.	Dextrose Solution 5% (Company B)	540 ml	385	250	(-) 35.1
7.	Tetracycline Hcl. Capsules	10 caps.	17,262	15,986	(-) 7.4
	" " 100 caps.	100 caps.	1,167	1,762	(+) 51.0
	" " 100 caps.	100 caps.	566	682	(+) 20.5
8.	Oxytetracycline Hcl. Capsules	10 caps.	585	358	(-) 38.8
9.	Oxytetracycline Injections	20 ml	2,861	6,676	(+) 133.3
10.	Ampicillin Capsules (250 mg)	10 caps.	1,402	1,281	(-) 8.6
11.	Streptomycin Sulfate Injections (1 g)	Vial	1,323	1,829	(+) 38.2
12.	Benzyl Penicillin Injns. (5 lacs)	"	3,998	4,284	(+) 7.2
	" " (Company A)	"	181	211	(+) 16.6
	Benzyl Penicillin Injns. (10 lacs)	"	4,863	5,139	(+) 5.7
	" " (Company A)	"	219	167	(-) 23.7
	" " (Company C)	"			
13.	Benzathine Penicillin (6 lacs)	Vial	111	100	(-) 9.9
	" " (12 lacs)	"	155	173	(+) 11.6
	" " (24 lacs)	"	24	60	(+) 2.5
14.	Sulfadimidine Tabs. (0.5 gm)	1,000 tabs.	2,437	1,698	(-) 30.3
15.	Sulfaguanidine Tabs. (0.5 gm)	10 tabs.	268	78	(-) 70.9
	" " 1,000 tabs.		728	1,013	(+) 39.1
	" " 10 tabs.		1,285	769	(-) 40.2
16.	Sulfadiazine Tablets (0.5 gm)	10 tabs.	5,705	5,619	(-) 1.5
	" Sodium Injns. 4 ml		68	116	(+) 70.6
17.	Tetanus Toxoid Injns. (1 ml)	Ampoule	142	150	(+) 5.6
	" " "	"	538	545	(+) 1.3
18.	A.P.C. Tablets (Company D)	1000 tabs.	3,227	4,088	(+) 26.7
	" " (Company C)	1,000 tabs.	694	966	(+) 39.2
19.	Analgin Tablets	1,000 tabs.	507	704	(+) 38.9
	" " 10 tabs.		10,173	9,736	(-) 4.3
20.	Atropine Sulfate Injn. (1 ml)	Ampoule	138	171	(+) 23.9
	" " (Company E)	"	118	130	(+) 10.2
	" " (Company F)	"	45	73	(+) 62.2
	" " (Company A)	"			
21.	Prednisolone Tabs. 10 tabs.		1,018	1,228	(+) 20.6
	" " 1,000 tabs.		88	107	(+) 21.6

Sources:-

Data quoted by permission from the monthly Reports of August 1979 and August 1980 respectively of the Operations Research Group (ORG), Baroda.