

Chapter 5

Study on Drug Prices (POST-TRIPS PERIOD, IN INDIA)

There are more than 60,000 formulations in nearly 60 categories available in the Indian market (OPPI compendium, 2004). Tabulating the price of each formulation and comparing trends over a ten year period (1995-2005), posed an immense task. Hence, a suitable model for the study had to be selected.

5.1 Methodology

The approach to study the impact of TRIPS on drug prices was to select the major therapeutic categories at global level and study the changes in prices of drugs in such categories. However, this posed a practical difficulty for the study in the Indian context. Therapeutic categories in the world are classified according to the value of sales of drugs in that particular category e.g. in 2003, Cholesterol and Triglyceride reducers ranked number one in sales, with a figure of US\$ 26.1bn representing 5.6% of the total sales (OPPI compendium, 2004). The same category cannot be extrapolated to India, because the figures include US and European markets, in which drug prices are much higher as compared to those in India.

Hence, though the actual consumption of a drug in volume terms may be low in India, the same may rank at the top in a therapeutic category because of high international prices.

Since the prices of Indian drugs are lowest in the world, sales turnover is NOT an accurate reflection of actual units of a drug being used. Also, owing to the peculiar socio-economic conditions of our country, certain diseases which are virtually non-existent in developed countries e.g. water-borne infection(s), are quite common in our country.

Malaria, Tuberculosis and AIDS have been identified as the three major killers in our country (OPPI presentation proceedings, 1998). Accordingly, for the present study, it was decided to survey the prices of select drugs in various therapeutic categories, post 1995. Relevant therapeutic categories and drugs were selected on basis of studies carried out by Nagesh Kumar (2003) and Lanjouw (1998). The prices of drugs were studied over a TEN year period (1996-2005), by compiling data from the Jan-Feb. issues of Indian Drug Review for each year. In addition to prices, data on the number of manufacturers for each drug was also collected.

The results are given in Table 5.1.

	Drug and Dosage(Pack)	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005*
	Antibiotic	Average Price (Rs.) rounded to nearest whole Rupee (Total No. of Manufacturers)									
1	Ofloxacin 200mg (4tab)	94 (3)	97 (4)	96 (4)	97 (5)	94 (5)	68 (20)	39 (41)	22 (55)	20 (66)	19(60)
2	Ciprofloxacin 500mg (10tab)	66 (63)	69 (71)	69 (80)	63 (81)	60 (80)	60 (89)	59 (104)	58 (101)	58 (79)	57(73)
3	Norfloxacin 400mg (10tab)	42 (27)	36 (28)	34 (25)	30 (28)	29 (28)	29 (30)	26 (33)	24 (29)	25 (26)	22(27)
4	Pefloxacin 400mg (4tab)	18 (16)	18 (17)	17 (16)	17 (16)	17 (15)	17 (13)	18 (15)	18 (12)	18 (10)	18(9)
	Antiulcer										
5	Ranitidine 300mg (10tab)	25 (30)	19 (31)	18 (34)	16 (32)	16 (33)	13 (35)	13 (48)	12 (45)	13 (39)	13(46)
6	Famotidine 40mg (10tab)	31 (32)	27 (30)	22 (29)	15 (25)	8 (26)	8 (24)	7 (26)	7 (22)	4 (20)	5(20)
7	Omeprazole 20mg (10tab/cap.)	34 (23)	35 (29)	35 (30)	35 (35)	37 (38)	36 (49)	36 (65)	33 (76)	36 (52)	36(47)
	Cardiac Care										
8	Lisinopril 5mg (10tab)	31 (14)	32 (16)	32 (20)	32 (22)	30 (24)	31(26)	33 (25)	32 (24)	32 (24)	35(22)
9	Enalapril Maleate 5mg (10tab)	15 (28)	16 (32)	16 (35)	15 (31)	16 (29)	16 (31)	16 (32)	17 (32)	17 (30)	17(32)
	Anti-histamine										
10	Astemizole 10mg (10tab)	15 (13)	15 (13)	16 (12)	16 (9)	16 (10)	16 (10)	17 (7)	16 (6)	15 (6)	15(4)
11	Ondansetron HCl 4mg (10tab)	74 (8)	73 (8)	84 (8)	84 (8)	74 (9)	78 (11)	80 (13)	75 (14)	66 (18)	58(22)
	Anti-TB										
12	Combination Drug A (1 kit)	15 (7)	17 (12)	17 (14)	17 (17)	17 (21)	18 (29)	17 (31)	16 (29)	15 (30)	17(32)
	Anti-malarial										
13	Chloroquine (10 tab. 250 mg)	7 (17)	9 (20)	9 (21)	9 (22)	9 (23)	9 (26)	8 (24)	7 (21)	7 (19)	11(20)
	Anti-viral (Anti-AIDS)										
14	Acyclovir (10 tab. 200mg)	192 (6)	149 (9)	130 (10)	69 (10)	69 (10)	57 (13)	58 (14)	56 (14)	54 (12)	58(13)
	Cholera Treatment										
15	Tetracycline (4 cap, 500 mg)	8 (10)	8 (10)	8 (10)	8 (10)	8(11)	8 (12)	8 (11)	8(11)	5 (9)	5(10)
	Anti Fungal										
16	Fluconazole (4 cap-50 mg)	42 (8)	42 (8)	41 (11)	41 (13)	41 (22)	41 (28)	42(42)	42 (41)	42 (39)	42(33)
17	Ketoconazole 200mg (10tab)	112 (6)	109 (6)	122 (6)	115 (6)	132 (6)	138 (6)	148 (7)	150 (6)	155 (6)	152(7)

Data Source: IDR (Indian Drug Review, Jan-Feb. issue each year, Mediworld Publication Group, New Delhi)

Data Compilation: National Instt. Of Pharmaceutical Education and Research (NIPER), Mohali-160062 India,

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* July-August Issue

The study on variation of prices of drugs also encompassed the study of retail prices of **eighty nine drugs** between the period 1987 to 2004. These drugs were categorized according to their inclusion under the Drug Price Control Order (DPCO). The drugs in category 1 were those which were covered under DPCO in 1987 and 1995 (*Covered 1987 & 1995*); while those in the category 2 were covered in DPCO in 1987 but excluded from DPCO in 1995 (*Covered 1987 & Out 1995*) and last category comprised drugs which were not covered under price control; neither in 1987 nor in 1995 (*Not Covered, 1987 & 1995*).

The prices of drugs in 1987 were considered as baseline (100%) and the prices in the subsequent years were computed as percentages – to reflect the variation. However, for the drugs where the price data was not available for the year 1987, the first available data was considered as baseline. Therefore, the increase in the prices was visible as percentages over 100% whereas the decrease was seen as values less than 100%. The variation of the prices was plotted as a graph, with the time (year) on the X-axis and the variation in the prices on the Y-axis. The graphs are enclosed as Annexure 3.

The statistical analysis for the variance of the prices for these 89 drugs does require further inputs, which was not possible during the period of the study. It could be taken up further as an independent study, if approved by the sponsors.

Limitations of the study

The data collected over a ten year period is from a published secondary data source ie. Indian Drug Review. Conclusions are based on the assumption that the prices as reported in the data source are correct.