Study on pricing method and price of top selling eight medicines from Nepalese manufacturers

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INRUD, Nepal

Executive Summary

This cross sectional study was carried out to find out ex-factory and retail price of medicines manufactured by Nepalese pharmaceuticals manufacturers, to compare the price of manufacturers, imported products and international price reported by MSH, to find out the pricing method of Nepalese industries and compare with other prevailing practices (e.g. Indian pricing control system) and to suggest about price regulation of the medicines

Manufacrurers were listed and purposively categorized into three groups

a. WHO-GMP certified industries
b. Industries in process of WHO-GMP implementation
c. Industries with no significant achievement in WHO-GMP implementation

Data on prices of key medicines both local pharmaceuticals and imported product in the market from 101 retailers from Kathmandu, Bhaktapur and Lalitpur districts.

National Drug Policy and Drug Act has provision of price regulation and there is Drug Price Monitoring Committee to advise the GoN to protect the national interest and making drugs available to consumers in affordable prices and determining of prices of drugs imported or manufactured within the country, they are not very effective in achieving the price control.

In some cases the actual selling price of the drug was found to be higher than the Maximum Retail Price (MRP).

In determining the production cost of the drugs which is the basis for determining the MRP of the drugs there has been considerable variation in the factors.

The frequent change in prices of the drugs in the market was found to be guided by different factors which varied from one to another.

Looking into the international price of drugs as well there does exist a great variation in high/low ratio of the drug price.

Acronyms

Asian	Asian Pharmaceuticals Pvt.Ltd.
ASP	Actual selling Price
CC	Conversion Cost
CME	Continue Medical Education
DJPL	Deurali Janata Pharmaceuticals Pvt. Ltd
ED	Excise Duty
GMP	Good Manufacture Practice
IEC	Information Education Communication
INRUD	International Network for Rational Use of Drugs
Lomus	Lomus Pharmaceuticals Pvt. Ltd.
MAPE	Maximum Allowable Post-manufacturing Expenses
MC	Material Cost
MR	Medical Representative
MRP	Maximum Retail Price
MS	Micro Soft
NDL	Nepal Drug Limited
NHRC	Nepal Health Research Council
NPL	Nepal Pharmaceuticals Pvt. Ltd
PC	Packing Charge
PM	Packing Material
Pvt Ltd	Private Limited
RP	Retail Price
SPSS	Statistical Package for Social Science
WHO	World Health Organization

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Background

Pharmaceuticals are a valuable and often critical tool in efforts to provide quality health care to patients. However, one-third of the world's population lacks reliable access to the medicines they need – primarily because they cannot afford to buy them. Serious concerns are being raised as to the high costs of health services including pharmaceuticals and the impact of those high costs on patient access and affordability. Though prices may vary considerably within a country, people do not have information on the price structure or where to find the best prices. The same is often true of government authorities and health care managers.

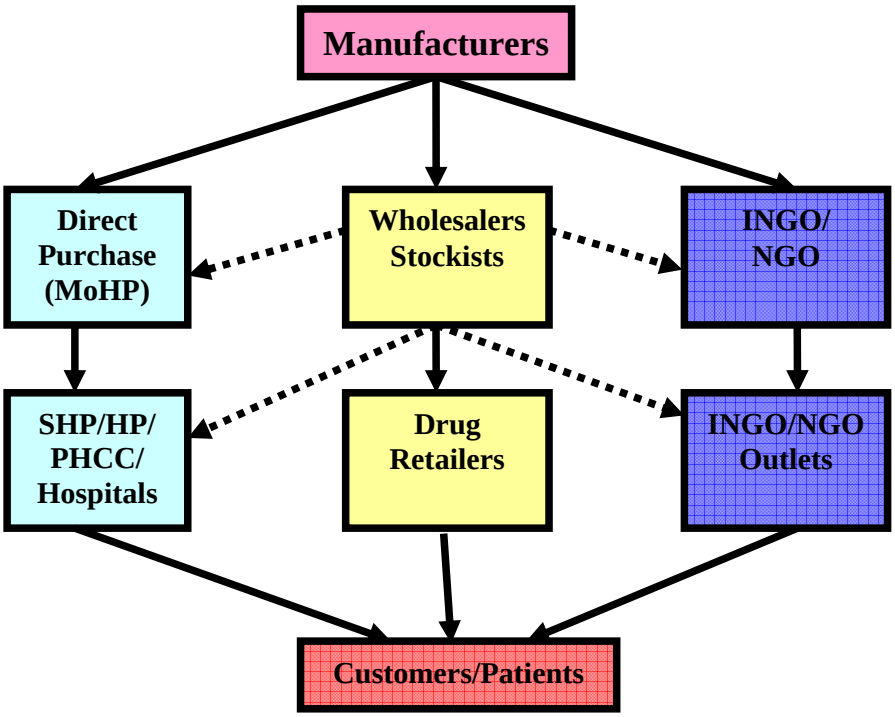
Defining and comparing pharmaceutical prices is complicated and not always consistent—many terms are used and many methodologies are employed. There is no one way to price a product. A variety of factors are considered in drug pricing, among them the relative commercial success of the agent; the prices, product features, and past actions of the competition; specific patient characteristics; the economic and social value of the therapy itself; the decision-making criteria of prescribers and those who influence that decision; company needs in terms of market position, revenue, and other considerations; the current and anticipated insurance reimbursement environment; company abilities, including available budgets and willingness to support the project; and the type of manufacturer supplying the drug.

There is the general impression that an appreciable amount is spent for the market promotion of the product, which makes the medicine expensive. The prices of the drugs are found to be increased by many times when we proceed from the actual cost of production to the consumers and the biggest leaps are being noticed during distribution. The distribution chain consists of different levels and includes transactions between manufacturers, wholesalers, retailers and consumers. It may also include other entities serving as intermediaries between these groups. Different terms are used to characterize costs or prices of drugs at the various levels within the distribution chain and in some instances different terms used in describing transactions

The importance of competitive analysis in pricing cannot be overstated. It has been suggested by many researchers that the pricing and presence of competitors, together with the uniqueness or therapeutic value of the new product, are the major determinants of launch prices. Similarly some argue that drug manufacturers are taking advantage of prescription drug users; whereas manufacturers say high drug prices can be attributed to the steep price of research and development.

There is no one price for a specific drug product. There are multiple customers, multiple distribution channels, multiple prescription drug reimbursement systems, multiple purchasing arrangements, multiple pricing methodologies, multiple marketing techniques, and multiple cost control tools. As history has shown, legislation, regulation, and market adjustments in one sector of the market often result in a chain reaction of intended and unintended consequences throughout the entire pharmaceutical marketplace. Drug prices vary across countries, and these differences between countries can be partly explained by the varying government intervention. There are many different ways that these countries implement price regulation.

Figure 1: Drug Distribution Channels in Nepal



The pharmaceutical market can be broken down into various segments essentially falling into three broad categories: public sector market, private markets and other than public and private sector as shown in figure 1.

Drug Consumption Scenario

In 2004/05, allopathic medicines worth Rs. 10 billion and 659 million in retail price were consumed in the country. Of which, 32% was met by domestic industries. In Nepal, the production of allopathic medicines started from 1972 in public sector. At present, there are 40 domestic industries of which, nine have WHO-GMP certificate. The domestic industries have registered 2867 products in Department of Drug Administration (DDA) for marketing. Likewise, 4370 products from 217 manufacturers are being imported. There are 825 wholesalers and 4957 retailers involved in sale and distribution of allopathic medicines.

The medicines produced in the country as well as imported from outside are distributed to the consumers through a channel comprising stockists/distributors, wholesalers and retailers. Each level of distribution channel has certain handling charge which gets ultimately added in the cost of medicines before they reach to the consumers. In addition, there may be marked variation in prices between terai, hill and mountain due to difference in transportation cost.

Some common pharmaceutical pricing terms:

Cash Discounts — Most pharmaceutical firms offer incentives to their customers for rapid payment of invoices. The most common terms offered are a 2% discount if the full bill is paid within 10 days of receiving the invoice. Thus a wholesaler that pays the regular ex-factory

price actually pays only 98% of that price if it pays within 10 days. The wholesaler that sells at cost plus 3%, then, is actually charging a mark-up of roughly 5%.

Ex-Factory Price — This is the actual selling price, before discounts, charged by the manufacturer. (see WAC). *Gross Profit (Margin)*— The difference between acquisition or production cost of a product and its selling price is known as the gross profit margin. The gross profit margin does not include other costs of doing business.

Loss Leader — A loss leader is a retail promotional pricing tactic in which the retailer charges a price that is below cost to entice customers into the store, hoping that the customers will make additional purchases while there. In retail pharmacy, a loss leader is not always priced below actual costs, but below AWP. It can, however, be argued that the transaction is indeed a loss when factoring in the professional time and services required to fill a prescription. Still, a pharmacy loss leader does not imply selling the product below acquisition cost.

Manufacturer's List Price — As the name implies, the list price is a price that has been published by a manufacturer. Many manufacturers make actual list prices available only to wholesalers, providing a catalogue that contains AWPs to the non wholesale trade (see Ex-Factory Price).

Net Price — Also known as "landed price," this is the price, or revenue, realized by a manufacturer after all discounts have been granted. *Net Profit (Margin)*—Net profit margin is the difference in selling price and all costs associated with doing business, allocated on a per-unit basis.

Rebate — A rebate is a retroactive discount that is paid to a customer after that customer has purchased the product from a wholesaler or retailer. The rebate allows the manufacturer to offer a lower price to some customers without taking on the burden of special distribution mechanisms.

Standard Cost — The product costing system used by most pharmaceutical firms is called "standard costing" or "fully absorbed cost." With this system, in addition to the variable costs such as ingredients, packaging, and direct labour, a portion of fixed cost (overhead) is allocated to each product and package. This cost is allocated on the basis of forecasts made at the beginning of the fiscal year. Such a system assures that, when unit volume increases, the incremental cost of a unit will decline, while the incremental cost of a product with a declining sales trend will increase significantly. It is not uncommon for half or more of a product's standard costs to consist of this fixed cost allocation.

Wholesale Acquisition Price (WAC) — This term is used by some publishers of pricing data to denote the ex-factory charge, before discounts to the wholesaler.

Objectives

The general objective of this study is to identify pricing difference of the same product from different manufacturers.

1. To find out ex-factory and retail price of medicines manufactured by Nepalese pharmaceuticals manufacturers

2. To compare the price of manufacturers, imported products and international price reported by MSH

3. To find out the pricing method of Nepalese industries and compare with other prevailing practices (e.g. Indian pricing control system)

Methodology

Study design

This study was cross-sectional. Main aim of this study is to explore the drug pricing policy in Nepal, drug pricing methods prevalent among the local pharmaceutical industries and to compare the drug retail price between the domestic and imported pharmaceutical products.

Data collection methods

The following methods were adopted for the study:

Desk review

Study team collected policy documents, rules and regulations, Maximum Retail Price (MRP) and guidelines related to drug pricing methods in Nepal from government sector, industries and wholesalers. The team collected other relevant information regarding pricing method of imported products importers, distributors and internet, particularly, documents published by Government of India.

In-depth interview

Manufacrurers were listed and purposively categorized into three groups

d. WHO-GMP certified industries
e. Industries in process of WHO-GMP implementation
f. Industries with no significant achievement in WHO-GMP implementation

From each group two industries were randomly selected to make six industries as sample. The selected industries were:

a. WHO-GMP certified industries

- **Deurali Janata Pharmaceuticals Pvt Ltd (DJPL):**

  It was established in 2047 B. S. and is located in Kathmandu district. It has authorised capital of 300 million and 120 million as issued capital. It manufactures wide range of therapeutic groups which are marketed in various dosage forms except injectables.

- **Nepal Pharmaceuticals Pvt Ltd (NPL):**

  It was established in 2042 B. S. and is located in Parsa district. It has authorised capital of 250 million and 150 million as issued capital. It manufactures wide range of therapeutic groups which are marketed in various dosage forms except injectables. It also produces veterinery products.

b. Industries in process of WHO-GMP implementation

- **Asian Pharmaceuticals Pvt Ltd (Asian):**

  It was established in 2053 B. S. and is located in Rupandehi district. It manufactures wide range of therapeutic groups which are marketed in various dosage forms except injectables. It also produces veterinery products.

- **Lomus Pharmaceuticals Pvt Ltd (Lomus):**

  It was established in 1986 A. D. and is located in Bhaktapur district. It has authorised capital of 100 million and 70 million as issued capital. It manufactures wide range of therapeutic groups which are marketed in various dosage forms except injectables.

c. Industries with no significant achievement in WHO-GMP implementation

- **Nepal Drug Ltd (NDL):**

  It is the only public sector industry and was established in 2029 B. S., located in Kathmandu district. It manufactures wide range of therapeutic groups which are marketed in various dosage forms including intravenous fluids.

- **Birat Pharma Pvt Ltd (Birat):**

  It was established in 2053 B. S. and is located in Morang district. It manufactures limited range of therapeutic groups which are marketed only in tablet, capule and liquid.

Study team developed in-depth interview guideline (See Annex) to collect the information and was pre-tested a pharmaceutical industry which was not included in the study. Pre-test was conducted on 22nd December, 2006 in Omnica pharmaceuticals. The team finalized the guideline with some modification based on feedback received from the pre-test. Principal investigator and consultant conducted in-depth interview with the managing director/marketing executives of the selected industries to retrieve the information concerning the pricing method. Study team took three months (Jan – March 2007) to conduct six in-depth interviews due to appointment with concerning persons of pharmaceutical industries.

Market survey

Study team recruited three Research Assistants (RAs). The Research Assistants collected the data on prices of key medicines (See Annex) both local pharmaceuticals and imported product in the market from 100 retailers from Kathmandu, Bhaktapur and Lalitpur districts. Study team conducted one day intensive orientation program for RAs which included class-room session as well as field practices. During data collection, they purchased the limited number of key medicines from selected retailers and they kept the record of paid price in preformatted form.

Reliability and validity

The following measures were adopted to minimize the possible biasness:

- Field-testing of indepth interview guidelines in one of the industries by the study team
- Conducting in-depth interviews by the same study team.
- Comparing data obtained from in-depth interviews and data obtained from desk review.

Data analysis

One of the research assistant entered all the data related to price of key products into MS excel. Median, range and variation were analysed. Data related to pricing methods were synthesized and final report was prepared based on quantitative information, synthesized information and document review.

Results

Documents related to drug pricing

National Drug Policy - 1995

The National Drug Policy 1995 has been implemented to fulfil the objectives of the National Health Policy 1991, to provide "health for all" and to improve and manage drug production, import, export, storage, supply, sales, distribution, quality assessment, regulatory control, rational use and information flow by establishing co-ordination among the governmental, non- governmental and private organizations involved in the activities.

One of the policy objectives has stated to develop suitable mechanism to ensure the availability of safe, effective and quality medicines at reasonable price throughout the country.

Drug Act 2035 (1978/79)

Drug Act 2035, which was first Amendment in 2045 (88/89) has led a provision for monitoring and fixing the price of drugs. For the implementation of the Clause 26 of the Act, a Drug Price Monitoring Committee having following members has been constituted for advising the Government of Nepal.

i.	Chief Drug Administrator, DDA	President
ii.	Representative, MoHP	Member
iii.	Representative, Ministry of Supply	Member
iv.	Representative, Ministry of Law	Member
v.	President, Nepal Chemist and Druggist Association	Member
vi.	President, Nepal Consumer Association	Member
vii.	Representative, Nepal Pharmaceutical Association	Member
viii.	Representative, Association of Pharmaceutical Products of Nepal	Member
ix.	Representative, Department of Industry	Member
x.	Representative, Department of custom	Member
xi.	Representative, Department of Taxation	Member
xii.	2 persons from Drug experts, nominated by the committee	Member
xiii.	Senior technical officer designated by DDA	Member Secretary

The prime responsibility of the committee is to advise the GoN to protect the national interest and making drugs availabe to consumers in affordable prices and determining of prices of drugs imported or manufactured within the country.

The committee is performing following activities to fulfil the objectives of sub-clause (1):

- Fix the upper limit of prices by analyzing the drugs imported or produced within the country.
- Fix the percentage that could be added in the retail prices of drugs during transporting it to geographically remote areas.
- Recommend the price to the DDA for implementation
- Approve the prices of drugs produced within the country on the basis of cost price submitted by the pharmaceuticals.
- Advise DDA if approved prices are not implemented.

The Price Monitoring Committee meeting held on Magh 4, 2050 (17th Jan, 1994), has made the following decisions:

1. (a) All drug retailers should display the price lists agreed by DDA and Nepal Chemist and Druggists Association compulsorily in the shops throughout the country. For the imported products (from India) should be fixed by the Nepal Chemist and Druggist Association by adding 3.5% for custom and local transportation, in the wholesale prices in such a way that the retailers should get 16% retail commission.

   (b) The MRP of the imported drugs should not exceed by 1.6 times of the price labelled in the packs or foil blisters.

   (c) There should be a provision that the retail price of the drugs should be available to the consumer whenever they want to see it.

2. The MRP of drugs produced in Nepal should be indicated in the labels or packs or foil blisters.

3. The MRP of the drugs should be made available through the importers to the Department of Drug Administration.

Drug pricing decisions

1. The Price Monitoring Committee meeting held on Chaitra 7, 2051 (21st march, 1995) has made the following decision for the first time in Nepal:

The prices of the following drugs have been decided:

	Glass Bottle	Plastic Bottle
a. Normal saline……..	NRs. 33	…….. NRs. 25
b. Normal Saline Dextrose…….	NRs. 33	…….. NRs. 25
c. 5% Dextrose……	NRs. 33	…….. NRs. 25
d. Dextrose 10%.....	NRs. 34	…….. NRs. 26
e. Ringers Lactate……	NRs. 34	…… NRs. 26

2. The Price Monitoring Committee meeting held on Ashar 9, 2054 (23rd June 1997) has made the following decision:

The prices of following drugs have been decided

Paracetamol 500 mg tablet ..... NRs. 0.55 (MRP)

Paracetamol liquid (125 or 120 mg/5ml)

60ml….....	NRs. 17.00 (MRP)
50ml….....	NRs. 15.00 (MRP)
30ml….....	NRs. 11.00 (MRP)

Drug pricing method in India

In India, the price of drugs are fixed and controlled according to Drugs (prices control) Order 1995. There is national pharmaceutical pricing authority to implement the price control in India. For the calculation of retail price following formula has been adopted:

RP = (MC + CC + PM + PC) X (1 + MAPE / 100) + ED

Where,

"RP"	Means retail price
"MC"	Means material cost and includes the cost of drugs and other pharmaceutical aids used including overages, if any, plus process loss thereon specified as a norm from time to time by notification in the Official Gazette in this behalf.
"CC"	Means conversion cost worked out in accordance with established procedures of costing and shall be fixed as a norm every year by notification in the Official Gazette in this behalf.
"PM"	Means cost of the packing materials used in the packing of concerned formulation, including process loss, and shall be fixed as a norm every year by, notification in the Official Gazette in this behalf.
"PC"	Means packing charges worked out in accordance with established procedures of costing and shall be fixed as a norm every year by, notification in the Official Gazette in this behalf.
"MAPE"	"Maximum Allowable Post-manufacturing Expenses" means all costs incurred by a manufacturer from the stage of ex-factory cost to retailing and includes trade margin and margin for the manufacturer and it shall not exceed one hundred percent for indigenously manufactured scheduled formulations
"ED"	Means excise duty

Provided that in the case of an imported formulation, the landed cost shall form the basis for fixing its price along with such margin to cover selling and distribution expenses including interest and importer's profit which shall not exceed fifty percent of the landed cost.

Explanation – For the purpose of this provison "landed cost means the cost of import of formulation inclusive of customs duty and clearing charges.

Drug pricing mechanism

The researchers visited all the selected pharmaceuticals to collect the information about causes in variation in the prices of the drugs, other prices besides the prices like wholesaler price, retailer price, and stockiest prices, determination of the Production cost, marketing cost and suggestions regarding the pricing of the drugs etc, and the following information were found.

Regarding the causes in variation in prices of the drugs, the informants from GMP certified company told that market economy, quality production, quality control, bio- equivalence, bio-availability, training cost, production cost, high overhead of company, communication expenses, salaries of the staffs, change in prices of electricity etc are responsible for frequent change in prices of the drug in the market whereas the informants from the pharmaceuticals which are in the process of GMP told that the responsible causes were change in prices of raw materials in the international market, change in exchange rate of US $, bulk purchase of raw materials, monopoly in certain drugs. Similarly the informants from the pharmaceuticals which are not in progress towards GMP told that buying raw materials in the bulk amounts (that reduces the prices), increase in price of raw materials, increased salaries, and competition in the profit margins to be given to the stockist are some of the causes for variation in prices of the drugs.

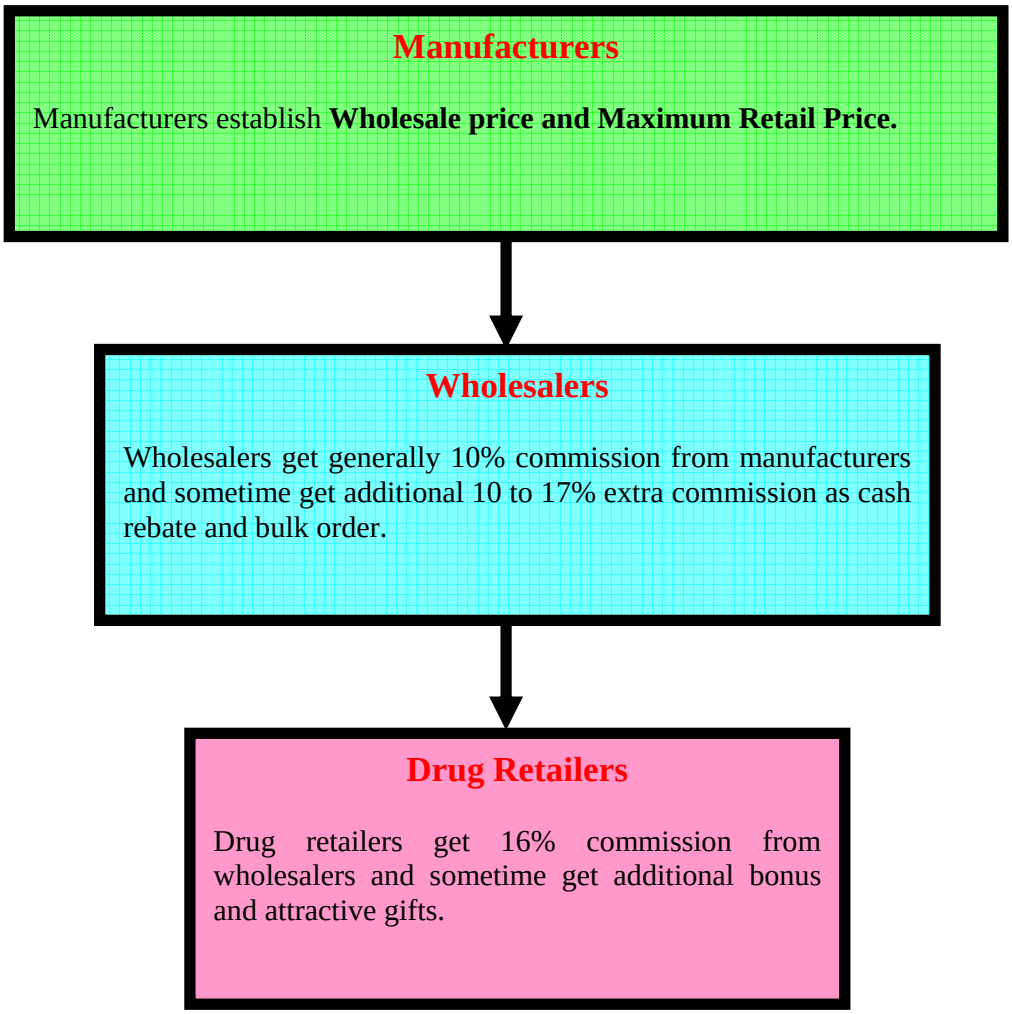
The mark- up prices determined by the pharmaceuticals were: distribution cost 4%, wholesaler price 10-27%, retailer price 16% to the factory price.

The GMP certified companies determined the production cost on the basis of raw material cost, formulation and quality control, packaging cost, and machine depreciation, in case of pharmaceuticals which are in the process of GMP certification it was determined on the basis of extra incentives for wholesaler on the amount of sale (+ 10-17%), raw material cost, formulation and quality control , cost of material failed in quality, bank commission/interest/LC, Wage (labour, pharmacists), utility cost, maintenance costs, development costs and operation cost of heavy equipments. Similarly for the pharmaceuticals which are not in the progress towards GMP, the production costs were being determined by the cost of raw material, tax, bank interest, packaging cost, delivery cost, and price of Indian products.

When the informants were asked about how the marketing cost were determined in their pharmaceuticals it was found that cost involved in human resource, conference, CME, IEC, travel cost, advertisement, sample gift etc in case of the pharmaceuticals with GMP certification; *MR training*, MR- TA/DA, bonus- package and item incentives, doctor-provisional cost, nominal gifts, scientific paper presentation cost, MR Salary etc in the case of pharmaceuticals in the process of GMP and in the case of pharmaceuticals not in the progress of GMP, they were MR salary, gift and transport etc.

Lastly when they were asked about some suggestions or recommendations on the issues, they told that primarily quality should be give priority and that should be followed by the cost; regulatory body should be strengthened; criteria for quality should be fixed, measures to regulate too many retailer and provision of reward and punishment should be made.

Figure 2: Price structure



Retail price of products from Nepalese industries

In the study, prices of the eight selected key drugs manufactured by six different Nepali manufacturing companies were analyzed in terms of the Maximum Retail Price (MRP) fixed by the pharmaceutical companies and Actual Selling Prices (ASP). The primary data on the actual selling prices were collected from 101 retailers of Kathmandu (41), Lalitpur (30) and Bhaktapur (30) districts. Since the data was skewed, median price was calculated to compare with the maximum retail price.

1. Amoxycillin 500 mg Capsule

Table 1: Amoxycillin 500 mg Capsule

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
DJPL	Perimox	8.90	8.50	8.90	9.00
NPL	Reymoxis	8.90	8.50	8.90	9.00
Asian	Omox	8.70	8.50	8.80	9.00
Lomus	Curemox	5.50	5.00	5.50	6.00
NDL	Nemoxyl	8.75	8.50	8.80	9.00
Imported					
Cipla	Novamox	7.20	9.16	9.56	10.00
Aristo	Aristomox	7.30	9.34	9.56	9.60
Wyeth	Wymox	13.50	13.44	13.50	13.73
International Price (MSH) (in US$)					
Median	0.027				
High/low Ratio	2.23				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 5.50 for the local product however, it was NRs. 9.56 for the imported product.

2. Vitamin B-Complex Syrup 170-200ml

Table 2: Vitamin B- complex Syrup 125 mg/5ml, 60ml

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
DJPL	Fortiplex	70.00	69.00	70.00	70.00
NPL	Vital	70.00	65.00	65.00	70.00
Lomus	Lomoplex	70.00	65.00	70.00	70.00
NDL	Ardiplex	50.00	50.00	50.00	56.00
Imported					
Merind	BG Prot	58.35	60.00	60.70	62.00
Albert David	Sloplex	56.48	60.00	60.50	61.00
E-Merck	Polybion		84.00	84.00	85.00
International Price (MSH)					
Median	0.005/ml				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 50 for the local product however, it was NRs. 60.50 for the imported product.

3. Dextromethrophan containing cough syrup 100 - 120 ml

Table 3: Dextromethrophan containing cough syrup 100 - 120 ml

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
DJPL	Vasodryl Plus	60.00	60.00	60.00	60.00
NPL	Nepex	50.00	50.00	50.00	50.00
Lomus	Lomohist	37.00	36.00	37.00	45.00
Imported					
Alembic	Ephedrex	58.16	61.00	61.00	65.00
Blue cross	TUSQ-D	64.20	61.00	67.00	67.00
International Price (MSH)					
Median	Not available				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 37 for the local product however, it was NRs. 61 for the imported product.

4. Metronidazole and diloxanide suspension 100 + 125 mg, 100 - 120 ml

Table 4Metronidazole and diloxanide suspension 100 + 125 mg, 100 - 120 ml

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
DJPL	Protogyl DF	37.00	30.00	35.00	35.00
NPL	Diarstat	33.00	30.00	30.00	35.00
Lomus	Diafur M	35.00	30.00	30.00	35.00
Imported					
Cipla	Dyrade-M	33.60	33.60	33.60	33.60
International Price (MSH)					
Median	Not available				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 30 for the local product however, it was NRs. 33.60 for the imported product.

5. Ciprofloxacin tablet 500 mg

Table 5 Ciprofloxacin tablet 500 mg

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
DJPL	Flontin	10.00	9.83	10.00	10.00
NPL	Proxin	9.50	9.00	10.00	10.00
Asian	Cicin	10.00	9.00	10.00	10.00
Imported					
Ranbaxy	Cifran	14.33	14.70	14.70	15.00
International Price (MSH)					
Median	0.0266				
High/low Ratio	1.89				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 10 for the local product however, it was NRs. 14.70 for the imported product.

6. Paracetamol syrup or suspension 60 ml

Table 6: Paracetamol syrup or suspension 60 ml

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
DJPL	Paracet	17.00	17.00	17.00	17.00
NPL	Supa	17.00	17.00	17.00	18.00
Lomus	Cetophen	18.00	17.00	18.00	18.00
NDL	Cetamol	17.00	17.00	17.00	18.00
Birat Pharmaceutical	Qumol	17.00	17.00	17.00	17.00
Imported					
Ipca	Pacimol	15.68	17.00	17.00	17.00
Geno	Algina	17.00	17.00	17.00	17.00
International Price (MSH)					
Median	0.0033/ml				
High/low Ratio	13.33				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 17.00 for the local product however, it was NRs. 17.00 for the imported product.

7. Nimesulide tablet

Table 7 Nimesulide tablet

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
NPL	Anim	3.00	3.00	3.00	3.50
Asian	Nims	3.00	3.00	3.00	3.00
Imported					
Panaceae	Nimulid	4.64	4.00	4.75	5.00
Aristo	Nimodol	3.79	3.55	3.90	4.00
International Price (MSH)					
Median	Not available				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 3.00 for the local product however, it was NRs. 3.90 for the imported product.

8. Omeprazole capsule 20 mg

Table 8: Omeprazole capsule 20 mg

Pharmaceutical Industry	Brand Name	MRP	Actual selling price		
			Minimum	Median	Maximum
Domestic					
DJPL	Norma	6.50	6.00	6.50	7.20
NPL	Oniz	6.00	6.00	6.00	6.50
Asian	Zes	6.00	5.90	6.00	7.00
Lomus	Ozole	5.50	5.50	5.50	5.50
Imported					
Aristo	Promisec	4.35	4.40	4.45	4.50
International Price (MSH)					
Median	0.0594				
High/low Ratio	27.05				

The lowest median Actual Selling Price (ASP) of the drug was NRs. 5.50 for the local product however, it was NRs. 4.45 for the imported product.

Discussion

Though *National Drug Policy and Drug Act* has provision of price regulation and there is Drug Price Monitoring Committee to advise the GoN to protect the national interest and making drugs available to consumers in affordable prices and determining of prices of drugs imported or manufactured within the country, they are not very effective in achieving the price control. It could be because of limitations of the committee as well as due to existing political and economic instability in the country. Only the prices of IV Fluids and Paracetamol has been fixed by the government.

In some cases the actual selling price of the drug was found to be higher than the Maximum Retail Price (MRP).

In determining the production cost of the drugs which is the basis for determining the MRP of the drugs there has been considerable variation in the factors.

The frequent change in prices of the drugs in the market was found to be guided by different factors which varied from one to another.

Looking into the international price of drugs as well there does exist a great variation in high/low ratio of the drug price.

Conclusion and Recommendations

Government's policy does not clearly guide the pricing mechanism for pharmaceutical manufacturers.

There is drug pricing monitoring committee but it meets occasionally. The committee has recommended to the government for fixing the retail price of only two products (IV fluids and paracetamol) so far.

The committee has also recommended mark-up in the imported products for wholesale and retail price but government has not approved it.

There is no uniformity in fixing MRP from different category of manufacturer as they consider different elements for fixing price.

There is considerable variation in retail price of drugs for the same type of formulation in similar packing size. Besides, there is variation in selling price of the same brand in different retailers. In some cases, this exceeds to MRP set by manufacturers.

There is also variation between MRP of imported and domestic products for the same formulation and pack size. Some of the imported products are even cheaper than domestic one.

There is no mechanism for price information to the consumers.

Recommendations

- The government should activate the drug price committee to monitor the products in the market and fix the maximum selling price for all products.
- The committee should also fix the mark-up for different levels in the distribution channel (e.g. stockists/wholesalers, institutional and retails)
- There should be legal provision and monitoring for price display at the retail counters.
- There should be a government agency for keeping, updating, and monitoring price of all products marketed in Nepal.
- Further research should be carried out to identify the different dimension and characteristics of promotional activities and their cost.

Annex

Annex 1: Study team

Naveen Shrestha	Principal Investigator
Prof. Kumud Kumar Kafle	Consultant
Puskar Silwal	Research Assistant

Annex 2: List of top selling medicines

1. Amoxycillin capsule 500 mg
2. Vitamine B-Complex Syrup 170 - 200 ml
3. Dextromethrophan containing cough syrup 100-120 ml
4. Metronidazole and diloxanide suspension 100 + 125 mg, 100 – 120 ml
5. Ciprofloxacin tablet 500 mg
6. Paracetamol syrup or suspension 60 ml
7. Nimesulide tablet
8. Omeprazole capsule 20 mg

Annex 3: Retail price collection format

INRUD, Nepal

Actual Selling Price (ASP) of Selected Drugs

Retailer shop: **District:**

1. Amoxycillin 500 mg. capsule

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)	Perimox	
Nepal Pharmaceutical Limited (NPL)	Reymoxis	
Asian Pharmaceutical Private Limited	Omox	
Lomus Pharmaceutical	Curemox	
Nepal (Royal) Drug Limited	Nemoxyl	
Birat Pharmaceutical	Bimox	

2. Vitamine B-Complex Syrup 170 - 200 ml

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)	Fortiplex	
Nepal Pharmaceutical Limited (NPL)	Vital	
Asian Pharmaceutical Private Limited		
Lomus Pharmaceutical	Lomoplex	
Nepal (Royal) Drug Limited	Ardiplex	
Birat Pharmaceutical	Sorvita	

3. Dextromethrophan containing cough syrup 100 – 120 ml

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)	Vasodryl Plus	
Nepal Pharmaceutical Limited (NPL)	Nepex	
Asian Pharmaceutical Private Limited		
Lomus Pharmaceutical	Lomohist	
Nepal (Royal) Drug Limited		
Birat Pharmaceutical		

4. Metronidazole and diloxanide suspension 100 + 125 mg, 100 – 120 ml

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)	Protogyl DF	
Nepal Pharmaceutical Limited (NPL)	Diarstat	
Asian Pharmaceutical Private Limited		
Lomus Pharmaceutical	Diafur M	
Nepal (Royal) Drug Limited		
Birat Pharmaceutical	Amidilox	

5. Ciprofloxacin tablet 500 mg

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)	Flontin	
Nepal Pharmaceutical Limited (NPL)	Proxin	
Asian Pharmaceutical Private Limited	Cicin	
Lomus Pharmaceutical		
Nepal (Royal) Drug Limited		
Birat Pharmaceutical	Bicipro	

6. Paracetamol syrup or suspension 60 ml

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)	Paracet	
Nepal Pharmaceutical Limited (NPL)	Supa	
Asian Pharmaceutical Private Limited		
Lomus Pharmaceutical	Cetophen	
Nepal (Royal) Drug Limited	Cetamol	
Birat Pharmaceutical	Qumol	

7. Nimesulide tablet

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)		
Nepal Pharmaceutical Limited (NPL)	Anim	
Asian Pharmaceutical Private Limited	Nims	
Lomus Pharmaceutical		
Nepal (Royal) Drug Limited		
Birat Pharmaceutical	Inflamtop	

8. Omeprazole capsule 20 mg

Pharmaceutical Industry	Brand Name	ASP
Deurali Janata Pharmaceuticals Limited (DJPL)	Norma	
Nepal Pharmaceutical Limited (NPL)	Oniz	
Asian Pharmaceutical Private Limited	Zes	
Lomus Pharmaceutical	Ozole	
Nepal (Royal) Drug Limited		
Birat Pharmaceutical		

Annex 4: Interview guidelines for Pharmaceutical industry

INRUD, Nepal

Interview guidelines for collecting information on drug pricing method

Name of Pharmaceutical Industry:

Guidelines:

1. When was your company established?

2. What are the authorized and issued capitals of your company?

3. What are the products of your company?

4. What are the channels of distribution of products to the consumers?

5. Would you please provide the price list of the products of the company?

6. When was the latest change in price of medicines?

7. What were the causes for the change?

8. Recently, we collected the MRP (Maximum Retail Price) of different medicines from the market and various variations were observed among the products from different domestic industries. Would you like to explain the reasons for such variations? (Ask by giving examples of some of the medicines)

Drug name	DJPL		NPL		Asian		Lomus		Nepal (Royal)		Birat	
	Brand	Price	Brand	Price	Brand	Price	Brand	Price	Brand	Price	Brand	Price
Amoxycillin 500 mg. capsule	Perimox	8.90	Reymoxis	8.90	Omox	8.70	Curemox	5.50	Nemoxyl	8.80	Bimox	
Vitamine B-Complex Syrup 170 - 200 ml	Fortiplex		Vital	65.00			Lomoplex	70.00	Ardiplex		Sorvita	
Dextromethrophan containing cough syrup 100 – 120 ml	Vasodryl Plus	36.00	Nepex	30.00			Lomohist	37.00				
Metronidazole and diloxanide suspension 100 + 125 mg, 100 – 120 ml	Protogyl DF	35.00	Diarstat				Diafur M				Amidilox	
Ciprofloxacin tablet 500 mg	Flontin	10.00	Proxin	9.50	Cicin	10.00					Bicipro	
Paracetamol syrup or suspension 60 ml	Paracet	17.00	Supa	17.00			Cetophen	18.00	Cetamol	17.00	Qumol	
Nimesulide tablet			Anim	3.00	Nims	3.00					Inflamtop	
Omeprazole capsule 20 mg	Norma	6.50	Oniz	6.00	Zes	6.00	Ozole	5.50				

9. Besides the MRP (Maximum Retail Price), what are other prices (for example, price to retailer, price to wholesaler, price to stockist, ex-factory price) being fixed by this company?

10. What are the basis for determining the above prices? (Write separately for each level of prices)

11. While determining MRP do you take into consideration the prices of similar drugs available in the market***? (Ask only if answer is not obtained in the Q.No.10).***

12. Would you explain about the production cost (raw material, depreciation of machine and building, packaging cost, transportation cost, marketing cost and overheads)? (***Ask only if answer is not obtained in Q.No.10.)***

13. What does the marketing cost cover?

14. Ask whether deal/bonus, incentive (gift), free goods are covered under marketing cost? ***(Ask only only if answer is not obtained in Q. No. 13)***

15. Grossly what percentage of MRP is shared by the marketing cost?

16. What are the basis for deciding the share of marketing cost?

17. Are there any policy guidelines for setting retail prices (from government or other sector)? If yes what are they?

18. Do you have any comments, queries, or suggestions regarding the subject matters discussed during the interview? ***(Finally thank the interviewee.)***