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## Pricing strategies in pharmaceutical marketing

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### ABSTRACT

Pharmaceutical products can be classified under two main categories: Prescription products and OTC products. The criterion for division is whether a product is marketed to the medical profession or directly to the consumers. Price is one of the most interesting and controversial topics in pharmaceutical marketing. The responsibility of allowing a particular price lays with the regulatory bodies, as in case of Pakistan, The Ministry of Health. In view of the peculiar characteristics of pharmaceutical industry, the different approaches actually applicable and practiced in the industry as Cost-Plus Pricing, Break-Even Pricing, Value Based Pricing, Competition Based Pricing, & Economy Pricing. This attempt made to come up with possible pricing approaches and strategies for pharmaceutical products. The amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or service. Internal factors affecting pricing include the company's marketing objectives, marketing mix strategy, costs, and organizational considerations. External factors that affect pricing decisions include the nature of the market and demand, competition, and other environmental elements. Besides that, a company may amortize its R&D cost over a period of time, which becomes an additional cost component. Generally, a 60% and above gross margin is considered to be reasonably good in pharmaceutical industry. However, in case of a new research molecule, the margin may be as high as 500-1000%.

**Keywords:** Prescription Products; OTC Products; Pricing Strategies; R&D Cost; Cost-Plus Pricing; Break-even Pricing; Value Based Pricing

### 1. Introduction

#### 1.1 Background of the Research

Marketing is, as in other industries is the driving force in pharmaceutical industry. Most of the people engaged in marketing activities in pharmaceutical industry are business graduates, with majors in marketing. However, the biggest problem they face, and which in turn becomes a challenge for human resource function of the company is the distinct character of pharmaceutical marketing. What these business graduates learn at schools do not encompass these unique characteristics and as a result, they find themselves inadequately equipped to handle the dynamics of pharmaceutical marketing <sup>[1]</sup>.

The controls maintained by regulatory bodies leaves very little room for maneuvering and even lesser for making an error. Therefore, the Pharmaceutical Companies cannot manipulate Pricing in any way; so, there was a need to develop a clear literature for the pricing issues in Pharmaceutical Products <sup>[2]</sup>. This research review is an attempt to elaborate the pricing strategies in Pharmaceutical Industry in Pakistan.

#### 1.2 Objective & Scope of the Research

- To adapt the general marketing text by incorporating the unique characteristics of pharmaceutical marketing.
- In view of the limited time and scope of this study, the focus will be the price and Pricing strategies for Pharmaceutical Products.
- This study covers the Pricing consideration and approaches. An attempt shall be made to come up with possible pricing approaches and strategies for pharmaceutical products.

#### 1.3 Definition of Price

The amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or service <sup>[3]</sup>.

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#### 1.4 Factors to Consider When Setting Price

##### i) Internal Factors Affecting Pricing Decision

Internal factors affecting pricing include the company's marketing objectives, marketing mix strategy, costs, and organizational considerations.

##### ii) External Factors Affecting Pricing Decision

External factors that affect pricing decisions include the nature of the market and demand, competition, and other environmental elements <sup>[4]</sup>.

#### 1.5 General Pricing Approaches

##### i) Cost-plus Pricing

Adding a standard markup to the cost of the product.

##### ii) Break-even Pricing (target profit pricing)

Setting price to break even on the costs of making and marketing a product, or setting price to make a target profit.

##### iii) Value-based Pricing

Setting price based on buyers' perceptions of value rather than on the seller's cost.

##### iv) Value Pricing

Offering just the right combination of quality and good service at a fair price.

##### v) Competition-based Pricing

Setting prices based on the price that competitors charge for similar products.

#### 1.6 New-Product Pricing Strategies

##### i) Market-skimming Pricing

Setting a high price for a new product to skin maximum revenues layer by layer from the segments willing to pay the high price; the company makes fewer but more profitable sales <sup>[5]</sup>.

##### ii) Market-penetration Pricing

Setting a low price for a new product in order to attract a large number of buyers and a large market share.

#### 1.7 Product Mix Pricing Strategies

##### i) Product Line Pricing

Setting the price steps between various products in a product line based on cost differences between the products, customer evaluations of different features, and competitors' prices <sup>[6]</sup>.

##### ii) Optional-products Pricing

The pricing of optional or accessory products along with a main product.

##### iii) Captive-product Pricing

Setting a price for products that must be used along with a main product, such as blades for a razor and film for a camera.

##### iv) By-product Pricing

Setting a price for by-products in order to make the main product's price more competitive.

##### v) Product bundle Pricing

Combining several products and offering the bundle at a

reduced price.

#### 1.8 Price-Adjustment Strategies

##### i) Discount and Allowance Pricing

**Cash Discount:** A price reduction to buyers who pay their bills promptly.

**Quantity Discount:** A price reduction to buyers who buy large volumes.

##### ii) Segmented Pricing

Selling a product or service at two or more prices, where the difference in prices is not based on differences in costs <sup>[7]</sup>.

##### iii) Psychological Pricing

A pricing approach that considers the psychology of prices and not simply the economics; the price is used to say something about the product.

##### iv) Reference Prices

Prices that buyers carry in their minds and refer to when they look at a given product.

##### v) Promotional Pricing

Temporarily pricing products below the list price, and sometimes even below cost, to increase short-run sales <sup>[8]</sup>.

## 2. Discussion

Price is one of the most interesting and controversial topics in pharmaceutical marketing. The responsibility of allowing a particular price lays with the regulatory bodies, as in case of Pakistan, The Ministry of Health. The objective of regulatory bodies is two pronged; they have to on one hand ensure the protection of patients' rights and provision of quality healthcare of masses, and on the other hand to allow companies to make reasonable profit so that they keep manufacturing the medicines needed for the people.

The process of pricing at the company level goes through the same steps as it goes in case of any other product, but the matter becomes totally different when an application is lodged with the regulatory bodies for allowing a price <sup>[9]</sup>.

### 2.1 Cost Structure in Pharmaceutical Products

#### i) Cost of active ingredient

Usually the highest cost component. In most of the cases, it ranges between 10-30% of total cost of product.

#### ii) Cost of other ingredients

A minor element, usually not higher than 3% of total cost.

#### iii) Cost of packaging material

Varies according to a material being used. In absolute terms, cost of packaging material ranges between Rs. 5-10 per pack of 10 tablets/capsules, per 60 ml bottle of liquid, per 5 ml injection & per 50 grams tube of ointments <sup>[10]</sup>.

#### iv) Cost of manufacturing

Depends on volume being manufactured in a factory. Besides that, a company may amortize its R&D cost over a period of time, which becomes an additional cost component. Generally, a 60% and above gross margin is considered to be reasonably good in pharmaceutical industry. However, in case of a new research molecule, the margin may be as high as 500-1000% <sup>[11]</sup>.

## 2.2 Pricing Structure in Pharmaceutical Products

Assuming a retail price of Rs. 100/-, following will be the price structure:

**Retail Price:** 100.00

Less: Retailer's margin@15% 15.00

**Trade Price:** 85.00

Less: Distributor's margin@10% 8.50

**Ex-Factory Price** 76.50

## 2.3 General Pricing Approaches

In view of the peculiar characteristics of pharmaceutical industry, we will try to discuss the different approaches actually applicable and practiced in the industry. Although, the approaches are same as in case of any other product, but the reasons and implications are different <sup>[12]</sup>.

## 2.4 Cost-Plus Pricing

The cost structure given in section 4.1 forms the basis of this type of pricing. The required profit margin is added to the cost of the product to arrive at the Ex-factory price, and then Trade Price and Market Retail Price. This type of pricing is usually done for old molecules where market is very crowded, and a higher price cannot fetch the required market share. The objective of company in such scenario is to either get some additional volume for their manufacturing facility, or to complement their existing product range <sup>[13]</sup>.

## 2.5 Break-Even Pricing

Normally adopted for products being manufactured for government tenders and institutional business. The concern is not profit, but again either to get volumes, or to get into large hospital pharmacies so that the positive impact may come from out-of-hospital practice of the doctors who have to prescribe their brand in hospital because of inclusion in pharmacy. Normally, this type of pricing policies are never adopted for research based high profile molecules, so that there may not be a negative impact on their high in-market price <sup>[14]</sup>.

## 2.6 Value Based Pricing

This approach for pricing is most commonly used by Multinational companies, en-cashing their good rapport with the doctors, especially in case of new molecules. There are countless examples where the cost of product has no relevance whatsoever and company has priced a product as per the perceived value for the doctors in their opinion.

However, things are becoming difficult now, and companies must be very careful while adopting this approach. They have to not only be careful about the wrong judgment of perceived value that they may make, and also the possibility of launch of same molecule by a local company with good reputation and quality. During the last few years, MNCs have for the first time starting to experience this onslaught by good local companies and now they realize that they cannot have their own way about pricing the product.

Since China & India have emerged as major producers of bulk drugs, the prices of raw material have calm down drastically, and so the pressure has increased on MNCs due to launch of low-priced brands of same molecules by local companies <sup>[15, 16]</sup>.

## 2.7 Competition Based Pricing

This is what most marketing oriented companies attempt to do these days. They take into account not only the perceived value, but also the value being offered by competition, and then arrive at a reasonable price giving them good margin as well as keeping them competitive in the long run. It is extremely important not only to take into account current competitors, but also expected competitors, which come with a much lower price and snatch the market share <sup>[17]</sup>.

## 2.8 Special Topics in Pharmaceutical Pricing

There is another pricing strategy practiced in pharmaceutical market, which can be termed as Economy Pricing. The concept is close to cost plus pricing, but the perspective is different:

### i) Economy Pricing

There are some companies, which focus only on offering brands of established molecules at the lowest possible price. They base their price on cost, and keep the margins to bare minimum. The reason this is being discussed separately is that the molecules selected have no impact whatsoever on the pricing strategy. They may even pick up a molecule where there is just one leading brand, and price theirs' at 75% lower price. Zafa Pharmaceutical is a typical example of such strategy in Pakistan. The company has over 150 brands and all are invariably lower in price as compared to any other company <sup>[18]</sup>.

### ii) Price Determination by Regulatory Authorities

It would be interesting to assess how the Ministry of Health decides upon the price. What they do is that they ask for the cost structure from the first applicant of any molecule, which is in 99% of cases a multinational company, which provides a highly inflated cost due to the element of transfer pricing. On the basis of this cost structure, the price is determined. The next applicant gets approximately 25-40% lower price, and this then becomes the reference price for all following applicants. Since the price allowed to MNC was inflated, all local companies get sufficient margins even at 40% lower price than the leader. It is just mind-boggling to see such approach, as it can be very simple for government officials to verify costing from neutral source and find out a reasonable price. However, as of today, this is status of pricing by regulatory authorities in Pakistan <sup>[19, 20]</sup>.

## 2.9 What is transfer pricing?

Unlike consumer products, services and consumer durables, pharmaceutical companies are not allowed to use the mass media for advertising their products. This closes a very important expense center for them, which is traditionally used by all other industries to reduce their profits and show a higher cost in order to evade taxes and paying dividends to the shareholders. Besides this, there is a strict code of ethics applicable which refrains them from spending beyond a certain limit on promoting their products <sup>[21, 22, 23]</sup>.

In this situation, the only area available for manipulation of cost is the actual cost of product. Companies aim to make the cost appear as high as possible by buying the raw material at an inflated price, in most of the cases from their own parent companies. This phenomenon is termed as transfer pricing, the reasons for which will be discussed the following section <sup>[24, 25]</sup>.

## 2.10 Why MNCs indulge into transfer pricing?

As the first step, we need to understand a little about the costing and pricing structure of the industry. The cost structure in pharmaceutical industry goes somewhat as follows:

Cost of Active Raw Material (Drug itself)+Cost of excipients (Material used to give the medicine a particular form like tablets, syrups etc.)+Applicable duties on import of material (Approximately 20% all inclusive)+Cost of labor and other overheads+Packaging Material= In-Factory Cost of Product <sup>[26]</sup>.

In the whole of the above structure, all heads except for raw material are almost consistent for all products, and do not allow much room for manipulation. Raw material, however form the basic chunk of the cost structure, and this is where there is much room for engineering. Now we come to what is transfer pricing <sup>[27]</sup>? We will explain this with the help of an example:

### Example

Suppose the Retail Price of a product is Rs. 150 for a pack of 10 tablets, each containing 10 mg of active drug. The ex-factory price for the product will be calculated as per the following formula:

Retail Price (Less) 15% Retailer's Margin (Less) 10% Distributor's Margin

In the above example, it will come to  $150 - 15 - 13.5 = 121.50$

This means that the manufacturer will get Rs. 121.50 for each pack. This will be termed as the ex-factory price of the product. Now assume that the cost of Raw material in the international market is US\$ 100/kg. If we take US\$ 1= Pak Rs. 60, the cost will come to Rs. 6,000 per kg. Add 10% duty to it and the landed cost for each kilogram of raw material will be Rs. 7,200. As we mentioned above, each tablet contains 10 mg of raw material. The raw material consumer per pack will be 100 mg, the cost of which will be 0.72. If we now put this figure in the cost structure given above, and take approximate costs of the remaining items, we can arrive at the total cost of each pack <sup>[28, 29]</sup>.

0.72 - Cost of Active Raw Material (Drug itself)+  
1.00 - Cost of excipients (Material used to give the medicine a particular form like tablets, syrups etc.) +  
5.00 - Cost of labor and other overheads +  
5.00 - Packaging Material =  
11.72 - In-Factory Cost of Product

If we take the above costs against the ex-factory price of Rs. 121.50 as calculated above, the profit margin comes to 90% <sup>[30]</sup>.

The profit margin coming in the above example will make the firm liable to pay a handsome tax to the government, a reasonable dividend/return to the shareholders (in case of a public company), and finally bank charges to transfer the retained earnings to their parent company. All of these are the things, which MNCs do not want to incur. They want their local profitability to be as less as possible, in fact negative to make sure that they do not pay taxes. They also want their profits to be transferred in advance as foreign exchange to their parent company. These objectives are achieved through transfer pricing <sup>[31, 32]</sup>.

In the example cited above, the company may decide to buy the raw material from the parent company at the rate of US\$ 10,000 instead of US\$ 100. See how this will change the whole cost structure:

72.00 - Cost of Active Raw Material (Drug itself)+  
1.00 - Cost of excipients (Material used to give the medicine a particular form like tablets, syrups etc) +  
5.00 - Cost of labor and other overheads +  
5.00 - Packaging Material =  
83.00 - In-Factory Cost of Product  
32% - Gross Margin

The gross margin shown above can easily be consumed through marketing and selling expenditure leaving nothing to account for at the end of the year. The key to understand is that the duty is 20%, whereas the corporate taxation comes to 50%. This way, even after paying the duty, the company saves around 30% of its profits and transfers the foreign exchange out of Pakistan and that too, officially <sup>[33]</sup>.

## 2.11 What is the impact on the economy?

Informed sources claim, that the multinational pharmaceutical companies cause a loss of a staggering 4-5 billion per year to the national exchequer. The situation appears graver when we realize that we are talking of just one industry, whereas most of the industries operating in Pakistan import their raw material from abroad. The issue becomes further complicated when we consider the import of finished products by corporate giants like Unilevers and P&G <sup>[34]</sup>.

Besides this, the amount we lose by tax evasion is also huge. The prices at which MNCs sell their products will leave them with at least 20% net profit. Pharmaceutical industry in Pakistan has a total estimated value of Rs. 45 billion, out of which 50% is MNC's share. In this scenario, we also lose around Rs. 2.25 billion in taxes. Another disadvantage we get is that MNCs get approval for a very high price based on the cost structure they present with their applications. This makes the cost of healthcare very high for the common men. Local companies also get a price which even being lower than MNCs, still give them extra-ordinary profits. In whole of this corporate hanky panky, consumer is the loser. Last but not the least, as a result of transfer pricing the country has to bear additional pressure in terms of balance of payments <sup>[35]</sup>.

## 3. Conclusion

In view of the peculiar characteristics of pharmaceutical industry, the different approaches actually applicable and practiced in the industry as Cost-Plus Pricing, Break-Even Pricing, Value Based Pricing, Competition Based Pricing, & Economy Pricing. The controls maintained by regulatory bodies leaves very little room for maneuvering and even lesser for making an error. In view of the limited time and scope of this study, the focus will be the price and Pricing strategies for Pharmaceutical Products. This study covers the Pricing consideration and approaches. This attempt made to come up with possible pricing approaches and strategies for pharmaceutical products. The amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or

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