

**THE EFFECT OF PRICING ON THE CONSUMPTION OF  
PHARMACEUTICAL PRODUCTS IN NIGERIAN  
HOSPITALS: A CASE STUDY OF AHMADU BELLO  
UNIVERSITY TEACHING HOSPITAL, ZARIA.**

**BY**

**BALAT LA'AITU  
MBA/ADMIN/00196/93-94**

**BEING A RESEARCH PROJECT SUBMITTED TO THE POST  
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ZARIA-NIGERIA**

**OCTOBER, 1998**

## **DECLARATION**

I hereby declare that this project, a partial requirement for the award of Master of Business Administration (MBA) of Ahmadu Bello University, Zaria is a product of my findings.

All source of information collected for the write up up are clearly acknowledge by means of references.

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**BALAT LA'AITU**

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**DATE**

## **CERTIFICATION**

This project report entitled “The Effect of Pricing on the consumption of Pharmaceutical Products in Nigerian Hospitals”. A case study of Ahmadu Bello University Teaching Hospital, Zaria; meets the regulations governing the award of the Degree of Master of Business Administration (MBA) of Ahmadu Bello University, Zaria and is hereby approved for its contribution to knowledge of literary presentation.

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Supervisor

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Signature and Date

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Head of Department

-----  
Signature and Date

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External Examiner

-----  
Signature and Date

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Dean, Post-graduate School

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Signature and Date

## **DEDICATION**

The project is 'dedicated to the LORD JESUS CHRIST.

## **ACKNOWLEDGEMENT**

I give God the glory for seeing me through this course work, for His Mercies, Love, Grace, Kindness and His faithfulness towards me and for the life He has given me that made it possible for me to carry out this work.

In preparing this work, I received assistance from many people too numerous to be mentioned individually. But I wish to express my sincere gratitude to all the people who assisted and encouraged me in various ways in carrying out this study.

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## **ABSTRACT**

Price is seen as the amount for which a product, service or idea is offered for sales regardless of its worth or value to potential buyers. Where as pricing in the other hand is the process of determining this value and converting it into monetary terms and then making comparison in the market place.

Factors like customers demand, competitors activities and production cost, are often the major determinants of price.

The study of A.B.U. Teaching Hospital was undertaken so as to have an insight on how price affect the consumption of Pharmaceutical products.

The major findings of the research are that, the Hospital Pharmacy Shop does not set price arbitrary and that price has little effect on the consumption of Pharmaceutical products. However the study revealed that availability and quality of drugs has a far greater effect on the consumption of a pharmaceutical product.

Apart from providing a basic framework of research on the organization understudy, this research has highlighted the general view of pricing. Thus the findings are likely to be of great interest or importance to both the hospital management and the pharmacists.

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# CHAPTER ONE

## 1.0 INTRODUCTION

The main objective of any organisation is to generate some satisfaction or benefits for its sponsor. Therefore, the Hospital exists principally to satisfy the needs of its patients.

The hospital has now become a business organisation as no treatment is given free of charge to patients again. In this case the objective of the hospital is to generate profits, so that services can be given continuously. The hospital can satisfy the need of its patients through prompt and adequate services provided and its obligation is to reward those who work for it with salaries and other benefits.

After the introduction of the Drug Revolving Fund (DRF) Scheme in the hospitals, the Hospital Pharmacy Shop started operating strictly as a business enterprise, with the objective of satisfying their patients and making profit.

Pricing has been called the most important business decision for any firm. Pricing mistakes may be costly but there are some that are not so costly and there are costs attached to any poorly made pricing decision. The costs can range from lost sales to selling at below the cost to acquire the product.

Price is thus only one of the elements in the marketing mix which determines the success or failure of a product and in any actual marketing situation, price exerts its influence in combination with other factors, including the intensity of the competition as it manifests itself in the attitude and behaviour of the customer or the customers.<sup>1</sup>

According to Kotler, P<sup>2</sup> an American Business Consultant, "Price is the only variable in the marketing mix that generates income, all the others such as product development, packaging, advertising and sales promotion generate costs. While this is certainly true in the formal sense, it would seem preferable to paraphrase it, and say instead, that the purposes of all the other elements in the marketing mix is to make the product sell

in appropriate quantity at the desired price, and that if the price is not right, all the merchandising efforts might be wasted.

It should be noted that since in this competitive world, profit margins tend to be narrow, even slightly difference in price can greatly affect profitability. And a firm which has achieved all its objectives except profitability and has no reasonable hope of doing better in the future could hardly be considered successful.

The price of an article is its market value expressed in terms of money. Market value is power in exchange. The price of an article or service, therefore, is an expression, in terms of monetary units, of the power which that article exercises in exchanged in the market; that is, of the money it will buy and hence, ultimately of the goods and services for which it can be exchanged. Price is a matter of fundamental interest for both buyers and sellers in the market.

For producers, the price at which they sells may have varying effects on their ultimate net profit. Price helps to determine the volume of their sales and may also affect their unit costs if their expenses vary with the volume of sales. While the consumer is interested in improvements in services and quality of product at any given time the relative price of similar products is his major interest.

The researcher recognize the fact that all strategies mapped out by the management Are designed directly or indirectly to enhance the overall profitability. However, the researcher will limit the study to the effect of pricing on the consumption of pharmaceutical products.

It is the belief of the researcher that if the pricing is not adequate, the realization of profit objective and satisfying the needs of the patients would be an illusion. It is against this background that the researcher intends to focus her attention on the effect of pricing on the consumption of pharmaceutical products.

## **1.1 STATEMENT OF THE PROBLEM**

Pricing is near the heart of marketing strategy because of its link to profitability. It is believed that price of a product should be based on the production costs. Any firm that sells its product less than the cost price will not survive for long. It is therefore not easy to arrive at a price that both satisfies consumers and provides the firm with profit.

With the introduction of price on drugs in Nigerian hospitals, it is seen that price has several effects it exerts on the health care system of the country. One of such effects is the effect it has on the consumption of drugs in such hospitals.

A simple assessment of the Ahmadu Bello University Teaching Hospital (A.B.U.T.H.) Zaria indicated that it is averagely performing well. But when further analysis is done considering the resources available to it, there is indication that the hospital can do better than what it is achieving now.

Thus, does charging for drugs affect the consumption of drugs or is it the availability of the drugs that affect the consumption of drugs.

## **1.2 OBJECTIVES OF THE STUDY**

We live in a mixed free enterprise society that depends primarily on a complex system of price to allocate goods and services among consumers, government and business. Since the government plays a major role in resources allocation something else must fulfill the role of allocator in our society. Price plays this role nicely by rationing and business. Since the government plays a major role in resources allocation something else must fulfill the role of allocator in our society. Price plays this role nicely by rationing and allocating resources to their most efficient use, that is, price helps us to distribute our limited resources.

Since price serves as an allocator of goods and services in our economic system. It is important for marketing executives, therefore to charge price that will earn the company a fair target return on its investment. To achieve this, specific attainable realistic and measurable

pricing objectives must be established. However, it is not easy to arrive at a price that both satisfied the consumers and provides the company with a profit. The price charged determined the quantity of goods and services that a consumer can buy from their limited income. With this, the main objective of this research study can therefore be briefly stated thus:-

1. To determine and reconcile the pricing objective of the hospital with the corporate objective.
2. To find out the importance which the hospital places on pricing pharmaceutical products.
3. To examine on highlight areas in which such practices and strategies are deficient and make recommendations that would help in improving the efficiency of pricing in the hospital.
4. To examine the pricing strategy used in setting prices for the pharmaceutical products.
5. Finally based on the findings, useful suggestions or recommendation would be given that might help the hospital in its effective pricing of pharmaceutical products.

### **1.3 SIGNIFICANCE OF THE STUDY**

No product has or can enter the market place without a price. Earning a profit is a basic objective for all businesses irrespective of their organizational set up.

For long price has been recognized as an accepted procedure for profit planning and many of the most successful companies have applied it to good effect over a period of years. Price determines in many aspects the volume that can be realized as well as the final profit. Price is the only element in the marketing mix that creates revenue, the other elements being costs.

In spite of the importance of setting the price, many organisations do not handle pricing well. The common mistakes are:-

1. Pricing is cost oriented in that companies fail to take sufficient account of demand intensity and customer psychology.
2. Price is not revised often enough to capitalize on changed conditions in the market place; price is often set independent of the rest of marketing-positioning, strategy.
3. Price is not varied enough for different products items and market segments.

The study was based on the premise that an understanding of the various factors that need to be considered before the price, for a pharmaceutical products will be of assistance to the management in the area of developing pricing strategies for increasing the consumption of the pharmaceutical products.

The significance of the study therefore is to determine the importance of pricing and its effects on the consumption of the pharmaceutical products.

The study will provide information of facts that will lead to efficiency and effectiveness in the determination of potentials for sales (consumption) of pharmaceutical products in the hospital.

Finally, this study will help in solving the complicated problems being faced by management in pricing of pharmaceutical products.

## **1.4 ASSUMPTION AND HYPOTHESIS**

### **1.4.1 ASSUMPTION**

The research is based on the following basic assumptions that:-

- (a) All organizations desire to achieve their main objectives. This may be clear in some firms and vague in others.
- (b) The fundamental objective of the A.B.U. Teaching Hospital, Zaria is to meet the patients need. All other objectives are secondary.
- (c) Pricing is a logical decision-This would seem to be a rather obvious statement, but like so many obvious truth, unless stated it may be overlooked.

- (d) Price like most other decisions of a firm should be aimed at achieving some goals.
- (e) That the importance of cost in price depends on the way in which one's price is determined. This of course contracts the opinion of many authors about the relationship between cost and price. Note however, that in some pricing techniques, cost is the most important single determinant of price. In others, it plays only a very minor role.

### **1.4.2 HYPOTHESIS**

Based on the assumptions listed above, the following hypotheses are made.

$N_H$  Price has effect in consumption of pharmaceutical products.

$AH_O$  Price has no effect in consumption of pharmaceutical products.

$N_H$  The prices of drug in A.B.U. Teaching Hospital are favourable.

$AH_O$  The prices of drugs in A.B.U. Teaching Hospital are not favourable

$N_H$  The increase in sales volume of pharmaceutical products in A.B.U. Teaching Hospital is as a result of good price.

$AH_O$  The increase in sales volume of pharmaceutical products in A.B.U. Teaching Hospital is not as a result of good price.

$N_H$  The increase in sales volume of pharmaceutical product in A.B.U. Teaching Hospital is a result of availability of the pharmaceutical products.

$N_H$  The increase in sales volume of pharmaceutical product in A.B.U. Teaching Hospital is not as a result of availability of the pharmaceutical products.

### **1.5 THE SCOPE AND LIMITATIONS OF THE STUDY**

It is pertinent to note that this research study has a scope limited to Zaria (ABUTH Zaria). Considering constraints of time and finance, a scope beyond this might produce something less satisfactory.

The scope is limited to the pricing effects on the consumption of the pharmaceutical products and the degree to which it take into account the interest of the patients.

It is important to note that all objective of this study could be fully achieved. Like any other research, several constraints were encountered during the study. Some of the major limiting factors during the research however include the following.

1. The difficulty in getting adequate information from the Hospital pharmacy shop because of improper record system.
2. Halo effect and inco-operative attitude of questionnaire respondents.
3. Time and financial constraints which limit the research to only A.B.U. Teaching Hospital, Zaria.

## **1.6 RESEARCH METHODOLOGY**

Data were collected through the use of primary and secondary sources of information. Also, the study examines the consumption rate of pharmaceutical products.

The primary source involves the collection of Data from the hospital pharmacy shop, questionnaires and personal interview especially where further clarification is required.

Secondary sources of data were obtained rom textbooks, journals and magazines. In addition data were also collected through interviews which were publications on pricing procedure, relevant articles in business newspapers and other publications in the library relating to pricing.

Data obtained was then analysed through a descriptive method.

## **1.7 DEFINITIONS OF TERMS**

### **DRUG**

A drug is any substance of biological or chemical origin which when applied to a living tissues produces an effect.<sup>3</sup>

### **DRUG REVOLVING FUND (DRF)**

This is a system in which an initial capital is provided for the purchase of drugs which are then sold to patients. Money realized from the sale is then ploughed back to purchase more drugs or supplies which are again sold and the money continuously recycled. Theoretically, it is perpetual system which is expected to be self sustaining.<sup>4</sup>

### **PRODUCT**

A product is a complex of tangible and intangible attributes, including packaging, colour, price manufacturer's prestige, retailers prestige and manufacturers and retailers services which the buyer may accept as offering satisfaction of wants and needs.<sup>5</sup>

### **STRATEGY**

The term strategy is derived from the Greek word "Strategos" which means a "general" in the military profession. It has been applied to business to mean some sort of planning or steps taken to achieve set objectives. According to Gilueck and Jauch, strategy means a unified comprehensive and integrated plan that relates the strategic advantages of the firm to the challenges of the environment and that is designed to ensure that the basic objectives of the enterprise are achieved through proper execution by the organisation.<sup>6</sup>

### **PHARMACEUTICAL PRODUCTS**

These are drugs and non-drugs used in the treatment of diseases.

## FOOTNOTES

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## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

Price is critical element in the marketing strategy of the industrial marketer. Price interacts with all other elements of the marketing mix to determine the effectiveness of each and of the whole, and is the only element in the marketing mix that produces revenue. As such price should be viewed as part of the product offering.

Price is an important variable in the buyers' perceptions and combines with his judgments about availability quality and other product attributes, to determine his overall perception of value, price is thus a key consideration in the strategic positioning of the product. To the industrial or institutional customer price is obviously a major determine on the economic impact of the purchased product on his cost structure.

From the sellers point of view, the price charged for the product, determines not only the profitability of the product, but also the margins that are available to support the costs associated withal other aspects of the product offering including technical; support, after sale service, delivery, credit and so forth.

Many of the difficulties associated with pricing start with the rather simple fact that often we do not really know what we are talking about. Very often one hears company executives asking such questions as to how an item ought to be sold for how much should be asked for. Some authors see price as an agreement between a seller and buyer concerning what each is to receive, the device or mechanism for translating into quantitative terms the value of the product to the customer as a point in time.

### **2.1 DEFINITION OF PRICE**

However, price has been defined differently by many authors. Some of the various definitions of price is as follows:

According to A. R. Morden <sup>2</sup>, Price is the value, or sum of money, at which a supplier of a product or service, and a buyer agree to carry out an exchange transaction and the prices at which such exchange transaction take place may either be:-

- (i) Fixed to the buyer – The customer either agrees to the price, or does not undertake the purchase.
- (ii) Negotiable:- In which case the supplier and customer bargain together until they arrive as a mutually agreed price at which the transaction can take place.

Rose, E.B<sup>3</sup> defines price as the money value of a commodity or service.

W.Brown and E. Jaques<sup>4</sup> defined price as the amount of money which will be accepted in return for the legal transfer of a product or service.

Coreys, E.R.<sup>5</sup> sees price as the art of translating into quantitative terms the value of the product to customers at a point in time.

Stanton, W.J.<sup>6</sup> defines price as simply an offer of an experiment to test the pulse of the market. That is if the customers accept the offer, then the price is fine, if they reject it, the price usually will be changed quickly or the product may even be withdrawn from the market.

According to Nwokoye, N.G.<sup>7</sup>, price can be formally defined as the amount of money need to acquire a given quantity of goods and services.

That is  $P = \frac{\#X}{Y}$  units

Where 'P' is price, X is in Naira and Y is in units of the product or service.

Within economic context it is usual to think of price as the amount of money we must sacrifice to acquired something we desire. That is price is considered as a formal ratio indicating the quantities of money need to acquired a given quantity of goods or services.

Price =  $\frac{\text{Quantity of goods and services provided by the seller}}{\text{Quantity of money or goods and services given up by the buyer.}}$

The notion of “Value” in these definitions is much flexible, subjective and is basically determined determined by the customers. Value may be concrete, such as the cost savings or it may be intangible, such as the owners pride in having a new product.

The term price can mean many things, depending on whether it is viewed from a macro or micro perspective. In a macro sense, Backman has described it in the following manner.

To the customer the structure of prices indicates the terms on which he can acquire the goods for which he spends his money income. To the producer, the structure of prices indicates the terms on which he may dispose of his goods and services or acquired the goods and services of others.

In micro sense, price is generally regarded to be the money value of a product or service as agreed upon in a market transaction.

Thus, a more managerially relevant definition of price might be stated as the total package of dissatisfaction that a purchaser must be willing to incur in order to obtain some specified package of benefits.<sup>8</sup>

Consequently, price has been defined as “The amount of money (plus possibly some goods) that is needed to acquire some combination of a product and its accompanying services.”<sup>9</sup>

Pricing therefore, parallels the total product offering.<sup>10</sup> The buyer for a stated price, receives not only the product, but the total product offering. The offering may include repairs and maintenance services, a brand name (which may be helpful in future promotion), a relationship with the seller which is valuable if there are shortages of goods and credit terms.

Also price covers the total marketing offering. This means that the owner also buys the information received through advertising or personal selling and the distribution method what has been chosen.

Pricing and price competition was rated as the number one problem facing marketing executives. Yet many companies do not handle pricing well. The most common mistakes are, pricing is too cost oriented and price is not revised often enough to capitalize on market changes. Price is set independently of the rest of the marketing mix rather than as an intrinsic element of market-positioning strategy, and price is not varied enough for different product items and market segments. Companies handle pricing in a variety of ways. In small companies, prices are often set by top management rather than by the marketing or sales department. In large companies, pricing is typically handled by divisional and product line managers. Top management sets the general pricing objectives and policies and often approves the prices proposed by lower levels of management. In industries where pricing is a key factor, companies will often establish a pricing department to set price or assist others in determining appropriate prices.<sup>11</sup>

## **2.2 NATURE OF PRICING**

In an economic sense, prices serves to allocate scarce resources among those desiring the resources. The marketing manager indeed, almost everyone concedes that as the price of a product is increased, the quantity sold will usually decline. However, this is an over implication of the market process and how buyers behave A demand curve that slopes downward and to the right may be intuitively acceptable, but the marketing manager can think of any products that are exceptions.

The apparent paradox between accepted and actual consumer reaction to price level is understandable when one recognizes that price is only one element in the firms' total marketing effort.

Effective promotion effort, product improvement, or improved customer service may more than offset the negative effect on demand produced by a price increase. Indeed, price increases may in itself have a salutary effect on demand. Customers may interpret high prices to mean greater quality, as shown for example by the price inelasticity of demand of pharmaceutical products, patent medicines, prestige products and professional services.<sup>12</sup>

### **2.3 THE THEORY OF PRICE**

Price is central in micro-economic theory, but unfortunately the elegant derivations of the theory are of little practical use to the price setter. The problem is that the demand schedules assumed in price theory are rarely known for individual producers' goods, and they are not easily estimated.

Price theory does however, provide many useful insights. One key derivation of the theory, namely that price should be set where marginal revenue equals margin costs is conceptually appealing. The practical price maker is unable to use this prescription and therefore has to develop other methods to set price.<sup>13</sup>

The micro-economic theory which is a carefully structured body developed by Economist deals with the process of establishing prices to maximize corporate profitability. Although instances in which this theory provides practical solutions to pricing problems are rare, it is helpful in illuminating the nature of the environment in which managers must make pricing decisions.

The purpose of the traditional theory of price is to help us to understand the behaviour of producers, distributors and consumers. Like all theories, including those developed in the field of the physical sciences, it is based on abstraction. But where as in the field of the physical sciences, the accepted theories give good approximation to the quantitative aspects of the phenomena concerned, and owing to their predictions value can serve as practical guides to action, the same cannot be expected from the economists' theory of price.

The reason for this are two folds, first since economics is concerned with the behavior of applied psychology, and it is common knowledge that unlike inanimate matter people do not invariable react to the same stimulus in the same way. Second, the abstractions on which traditional theory of price is based are far too restrictive to justify its application, except in some rather rare special cases.

In its basic form, the theory rest on the following four assumptions in respect to the supply side of the market, that:-

- i) The business man has only one aim, and that is the maximization of his total profit, both in the short and long run.
- ii) The firm produces (or handles) only one product or if it has general products, they are invariably produced and sold in the same proportions.
- iii) The business man knows exactly what each level of output would cost him.
- iv) The business man knows how much he could sell at each possible price.

These assumptions immediately lead to the conclusion that the fir will increase its rate of output up to the point where any further increase would add more to its costs than to its sales revenue.

A corresponding look at the theory of demand would reveal a set of three basic assumptions, the relevance of which to real life is limited, to say the least.

- (a) That the customer is fully aware of the quantity and price of all the goods and services offered for sales in the market.
- (b) That he takes account only of the present situation and hence his behaviour is in no way influenced either by the events of the past or by his expectations of the future.
- (c) That if he is a consumer, he will distribute his expenditure so that his purchases should give him the maximum possible satisfaction, but if he is a businessman, he will buy with the maximum amount of profit in mind.

These considerations now lead us to the concept of law of demand, according to which the customer will always buy more at a lower price than at a higher price.

Since the intention of the proposers of these theories was not to provide guidance either to producers or to customers, but merely to rationalise their behaviour, it is small wonder that the business world has not taken much interest in them.

Pricing policies here, however, significantly benefited from the application of several modern methods based on specific theories developed independently of the mainstream of economic doctrine.

## **2.4 THE ROLE OF PRICE**

The traditional theoretical role of price as an allocator of scarce resources is modified somewhat in today's economic system.<sup>14</sup> To put the role of pricing in a company's marketing programme in its proper perspective, then it can be said that price is important but not all important, in explaining marketing success. The current state of the

economy has a considerable influence on the important that business executives attach to pricing relative to other marketing activities. When economic conditions are good and consumers feel relatively affluent, then price is not rated as important as product and consumers planning or promotional activity. During periods of recession and inflation, however, executives consider that pricing is an extremely important activity contributing to marketing success.

The basic problem of an economic society is to allocate resources among the members of the society as a whole. To achieve this welfare objectives each resource should be used to perform the function that it contributes most efficiently to the society. In a planned economy the central planning agency develops plans for allocating resource. In a market economy, the price system allocates resources. That is, prices furnish the guide posts that indicate how resources should be used. Prices determine what products and services should be produce and in what amounts, how these products and services should be produced, and for whom the products and services should be produced.

Thus price affect incomes and spending behaviour. For business people, profits are determined by differences between their revenues and their costs, and their revenue are determined by multiplying price per unit sold by the number of units sold. For a consumer, with a given income level, price influence to a great extent what is to be bought and how much of each product to buy.

## **2.5 THE IMPORTANCE OF PRICE**

The importance of prices therefore is not to be denied, even though it may not keep the marketer preoccupied with it as to some of the other components of the marketing mix.

Importance of price can be look at in two areas.

1. In the Economy:- Pricing is considered by many to be the key activity within the capitalistic system of free enterprise. The market price of a product influence wages, rent, interest and profits.

That is, the price of a product influences the price for the factor of production, labour, capital and entrepreneurship. Price thus is a basic regulator of the economic system because it influences the allocation of these factors of production. High wages attract labour, high interest rates attract capital, and so on. In its role as an allocator of scarce resources prices determines what will be produced (supply) and who will get how much of the goods and services that are produced (demand).

Pricing takes on added importance during periods of inflation and recession, such as we have been experiencing for the past several years. Consumer confidence in the economy, consumer buying psychology and consumer buying behaviour are especially affected by price movements during such periods.

- (ii) In the individual Firm

The price of a product or service is a major determinant of the market demand for the item. Price affects the firm's competitive position and its share of the market. As a result, price has a considerable bearing on the company's revenue and net profit.

The price of a product also affects the firm's marketing program. In product planning, for example, management may decide to improve the quality of its product or add differentiating feature. This decision can be implemented only if the market will accept a price high enough to cover the costs of these changes.<sup>15</sup> At the same time, there are usually forces that limit the importance of pricing in a company's marketing programme. Differentiated product features or a favourite brand may be more important to consumers than price. Infact, one object of branding is to decrease the effect of price on

the demand for a product. Such forces tend to make prices more rigid or strictly that is, less responsive to changes in demand or supply.

- i) Sellers consider price to be one of the key influences on buyer choice behaviour.
- ii) Price is the only element in the marketing mix that creates sales revenue, others are costs.
- iii) Prices are quantitative, unambiguous and undimensional, whereas product quality, product image, customer service, promotion etc are qualitative, ambiguous and multi-dimensional,

## **2.6 THE IMPORTANCE OF PRICING DECISIONS**

Pricing decisions reflect an organisation's evaluation of demand, competition, government regulations, brand and company's image, corporate and company goals in general and in particular for the product. These decisions also cover establishment of discount policies, terms of payment, and time of payment.<sup>17</sup>

Prices can be charged by changing the quantity offered, the quality offered, the discount applicable, the premiums offered, the time when ownership is transferred or the place of transfer.

Proper or improper pricing strategy can often determine the success or failure of an enterprise's entire marketing strategy. After firms determine prices by marking up cost figures supplied by the financial division and therefore, are left with only their promotion and distribution decision. But the pressure of adopting to today's economic environment is putting additional burdens on the profits of a firm.<sup>18</sup> Six of these pressures are highlighted below:

- i) Faster technological progress- Technological progress has reduced the average age of products.

- ii) Proliferation of new products – Products innovation has clearly resulted in a literal population explosion of new products.
- iii) Increase demand in services – An increase in demand for services built into products. These product attached services basically provide additional conveniences for the user and reduce the effort and time needed to use the products.
- iv) Increased in both local and foreign competition.
- v) The changing legal environment.
- vi) Material shortages and inflation – Economic factors have placed additional pressures on the costs of producing products and services. In addition material shortages often have force firms to reduce their product lines and re-evaluate their efforts to develop new products.

Pricing decision is so critical that it determines the success or failure of a company. An appropriate price enables the firm to obtain the necessary market share in terms of volume, while an in-appropriate price can do an incalculable harm. On this score Okhimamhe <sup>19</sup> (1985) said that a badly calculated price can deprive the business of the money necessary to make the business a valid proposition. In a similar manner, Rose <sup>20</sup>, E.B. (1984) said that by carefully studying information about customers, competition and industry's economics, and by selectively applying appropriate technique "Pro-active price" can earn million of Dollars that might otherwise be lost.

## 2.7 THE OBJECTIVES OF PRICING

Every marketing task including (and perhaps, especially) pricing must be directed towards the achievement of a goal. In other words, management should decide on its pricing objectives before determining the price itself.

Many objectives guide pricing decisions in industrial firm. Some firms emphasize certain objectives and give lesser priority to others, but in most situations, prices reflect the interplay of several objectives. The complexity of pricing objectives is a result of several factors, including interaction of pricing with other elements of the marketing mix, the dynamic nature of market conditions (especially competition and the level of demand) and the specific impact of pricing actions on the financial aspects of the firm.<sup>21</sup>

Pricing should be consistent with and contribute to the achievement of marketing and corporate objectives and strategies. Unfortunately, many companies do not have many companies do not have integrated, operational pricing objectives, for example, many companies state that the objective of pricing is to maximize profits. However, in almost any firm there are factors that mitigate against it must be considered in addition to, a goal of profit maximization. For example, the firm may be interested in increasing its market share or its rate of growth, even at the expense of immediate profits, may fear that it would incur adverse public reaction to an attempt to maximize profits, or may feel that ethical considerations prevent it from operating in such a way as to maximize profits. While some considerations may be considered, attempts to contribute towards the long term profitability of corporate operations, most would consider them to be modifications to an objective of profit maximization.

A company may pursue additional objectives. The clearer a firm is about its objectives, the easier it is to set price. Each possible price will have a different impact on such objectives as profits, sales revenue and market share.

The main goals in pricing are as follows:-

i. Survival – Companies set survival as their major objective if plagued with over capacity, intense competition, or changing consumer wants. To keep the plant and the inventories turning over, they will often cut prices. Profits are less important than survival. Troubled companies such as Chrysler and International Harvester in the past resorted to large price-rebate programs in order to stay alive. As long as their prices covered variable costs and some fixed costs, they were able to continue in business. However, survival is only a short run objective. In the long run, the firm must find a way to add value in the market or face extinction.<sup>23</sup>

ii) Profit Oriented – This could be:-

a) To achieve target return on investment or on net sales.

A firm may price its products or services to achieve a certain percentage return on its investment or on its sales. These goals are used by both middlemen and manufacturers. Many retailers and wholesalers use target return on net sales as a percentage mark-up on sales, that is, large enough to cover anticipated operation costs plus a desired profit for the year. Achieving a target return on investment is typically selected as a goal by manufacturers that are leaders in their industry. The reasoning behind the frequent use of target-return pricing by industry leaders is as follows:-

A dominant firm can set its pricing goals more independently of competition than can the smaller “follower” firms in the industry. Also in large multi-divisional companies a target return goal gives management an objective basis for evaluating the performance of the various divisions.

ii) Maximize Profits- The pricing objective of making as much money as possible is probably followed by a larger number of companies than any other goal.

A profit maximization goal is like to be far more beneficial to a company and to the public if practiced over the long-run. Pricing by a company that cannot see beyond the end of next month's profit and loss statement often results in repercussions that may be detrimental to the firm. Practice over the long-run, however, profit maximization should result in a socially desirable allocation of resources. Profits attract new capital into the field. Prices tend to remain at a reasonable level, and supply is sufficient to satisfy market demands.

To maximize profits over the long-run, firms may have to accept short-run losses. A firm entering a new geographical market or introducing a new product frequently does best by setting low prices to build a large cliental such companies often do not expect to show a profit for the first few years, but they are laying a solid foundation for adequate profits over the long run.

The goal should be to maximize profits on total output rather on each single item marketed.

Many companies set prices that will maximize current profits. They do this by estimating the demand and costs associated with alternative prices and choose the price that will produce the maximum current profit, cash flow, or rate of return on investment.

3. Many Oriented- In some companies, management's pricing attention is focused on sales volume rather than on profits. In these situations, the pricing goal may be to increase sales volume or to maintain or increase the firm's market share.

(i) Increase Sales Volume – The pricing goal is usually stated as a percentage increase in sales volume over some period of time. However, to increase sales volume may

or may not be consistent with the marketing concept that advocates profitability in one case and in another case, management may decide to increase its volume by discounting or some other aggressive pricing strategy, perhaps, incurring a

loss. Thus management can take a short-run loss if the increased sales enable the company to get a foot-hold in its market.

- (ii) Maintain or increase market Share – The major pricing objective in both large and small companies is to maintain or increase the share of the market held by the firm. One factor that makes this a workable goal is that a company can usually determine what share of the market it enjoys. In some respects, market share is a better indicator of corporate health and thus a better pricing goal, than target return on investment. This is true specially when the total market is growing.

#### 4. Status Quo-oriented

Two closely related goals which are to stabilize prices and to meet competition are the least aggressive of any of the pricing goals.

- i) Stabilize Prices- Price stabilization often is the goal in industries with a price leader. Especially in industries where demand can fluctuate frequently and sometimes considerably, large companies will try to maintain stability in their pricing. Such price leadership does not necessarily mean that all firms in the industry charge the same price as that set by the leader.

A major reason for seeking stability in pricing is to avert price wars, whether demand is increasing or declining. However, adherence to the industry leader's prices is not as rigid today as it used to be, especially during periods of sluggish demand. In some instances, smaller firms are cutting below the industry price and are not suffering reprisals from the large firms in the industry.<sup>24</sup>

- ii) Meet competition - Countless firms, regardless of size, consciously price their products simply to meet the competition. In industries where there is a price leader and where the product is highly standardized, most firms have a follow – the leader policy.

## **2.8 PRICING POLICIES**

Station, W.J.<sup>25</sup> defines policy as the managerial guide to future decision making when a given situation arises. Thus a policy becomes the course of action, followed routinely anytime a given strategic or tactical situation arises. Many companies set up a pricing department to develop pricing policies and establish or approve pricing decisions. Their aim is to make sure that the sales people quote prices that are reasonable to customers and profitable to the company.

Kollat, D.T., Blackwell, R.D. and Robeson, J. F.<sup>26</sup> defines price policies as a general principles, rules or action guidelines that the firm endeavours to follow in making daily pricing decisions. These policies must be established within the context of a carefully structured set of pricing objectives, because failure to carefully coordinate price policies with the overall objectives of pricing will almost certainly diminish the probability of successfully achieving the firm's marketing and total corporate objectives.

The process of establishing price policies is extremely complex, primarily because it involves the consideration of a vast array of factors external to the firm.

Pricing policy must somehow touch base with such economic factors as foreign competition, competition of substitute products, industry competition yield on investment, average costs, marginal cost, product demand, quality and other selling features of the product and conditions of the market.

Profit making remains the guiding principle for most companies in establishing price policies. There is no formula for success in pricing that fits every business, instead each firm must weigh the facts and decide on pricing policies based upon factors relevant to its own market environment. The following types of decisions must be made.

- (1) How should our price compare with average prices in the industry? Specifically, should it be 2 percent above or 4 percent below the average? And when we speak of average which firms prices are to be included in the computation.
- (2) How fast will we meet price reductions or increases by rivals?
- (3) How frequently will it be advisable to vary price? To what extent is stability of price advantageous.
- (4) How should the firm make use of fair trade price maintenance?
- (5) How frequently should the firm run price promotions?

A wide variety of pricing policies are possible, however, they can be classified into three critical categories. First a company can engage in an openly aggressive effort to seize a part of its rival's market share. Cutthroat pricing, advertising wars, excessive product expenditures and so called unfair methods of competition. A second alternative might be termed a "conservative marketing policy" which represents an attitude of live and let live. Striving to change the same price, keeping advertising expenditures at a level that will not invite retaliation in the form of advertising wars, and following common marketing procedures exemplify such a policy.

Finally, there may be implicit or explicit agreements, various kinds of pooling arrangements and explicitly trade practices or procedures agreements may be indicative of such behaviour. These three approaches can be used simultaneously.

It is also useful to establish a policy guiding the pricing of products over their life cycles. During the initial stages of the cycle, the product is likely to be in its strongest competitive position. As competitive products enter the market in the later stages of the cycle, the products market strength may decline substantially. The policy that the firm adopts for pricing a new product will significantly affect the speed with which the product moves through this cycle.

Two contrasting pricing policies for new products are skimming and market penetration offered by patents, the elasticity of demand in the target market, and the firms target rate of capital recovery.

Skimming policy or policy of sliding down the demand curve, is designed to take the cream of the market at each successively cover price level. This cascading process is often used to maximize profits on new products. It is especially appropriate (1) in the product introductory stage when demand is fairly elastic in the upper stages. (2) When the product is well protected by patents or is difficult to duplicate rapidly. (3) When the firm has established an accelerated target rate of capital recovery. (4) When the firm is uncertain of the manner in which the target market may react to alternative price levels. In contrast, a penetration policy is particularly attractive.

- (1) When it forces competitor to stay out of the market initially or even indefinitely.
- (2) Where there is no elite market for the product, that is, where the entire demand curve is fairly elastic.
- (3) When the firm wishes to encourage widespread adoption of the product.
- (4) Under circumstances where as volume expands, economies of scale will reduce costs, and
- (5) When it is desirable to slow down the passing of the product through the life

cycle.

A firm can adopt one price or flexible prices. A one price policy offers the same price to all customers who purchase goods under essentially the same conditions and in the same quantities.

A flexible price policy indicates that the firm will sell the same products and quantities to different customers at different prices. Prices are varied on the basis of the particular customers' ability to bargain or on competitive factors in the market place. While flexible price policies are not as common place as they once were, they may be appropriate under extremely competitive market circumstances where the firm's salesmen may be called upon to make adjustments in price relative to local conditions. However, such policies are not without legal difficulties and may cause ill-will on the part of customers who learn that others have obtained lower prices for the same total product.

There is interdependence among pricing policies and other aspects of marketing operations such as decisions regarding geographic pricing policies. Approximately 9 percent of the nation's gross national product consists of charges associated with the movement of freight. Almost every firm incurs some of these charges and consequently must determine to what extent it wishes to recover them through the prices it charges. Measures that might be relied upon in this respect are free on board (F.O.B) origin and delivered pricing.

## **FREE ON BOARD – ORIGIN**

When the seller quotes a price free on board-origin or free on board factory, this is the price of the product ready for shipment at the plant or warehouse. The buyer pays any freight bills associated with the shipment. Since the burden of shipment rests with

the purchaser, it is his responsibility to determine whether to utilize private or public transportation and to specify carriers.

Free on Board-origin pricing relieves the seller of the burden of transportation and assures him that he will receive the same net return from every sale of the product regardless of where the buyer may be located. However, the most important and often critical limitation of such a policy is that it may make it virtually impossible for the seller to sell his product in distant markets.

Delivered pricing policies are relied upon by sellers interested in selling in distant markets. The most common of these policies include the uniform delivered price, freight equalization, zone pricing and basing point pricing. Each contains the same basic ingredients, the price of the product itself and some portion of the transportation costs involved in getting the product to the buyer.

(1) Uniform Delivered Price

This approach is exactly the opposite of free on Board origin, because the seller assumes all the costs of delivery. The prices customers pay are equal regardless of their location. However, the net prices the seller realizes differ as a function of the location of the various customers being served.

(2) Freight Equalization

Here the seller absorbs only those transportation costs that he absolutely must in order to compete in distant markets. Freight equalization makes the delivered prices of his product equal to or less than that of rival located closer to the customers.

(3) Other delivered Pricing Alternatives

Zone pricing and basing point pricing are further variations on the basic theme of freight absorption, such policies are difficult to administer and may be illegal. As a

consequence, before adopting such policies, the seller is well advised to carefully examine his need to use them.

Multi product firms usually have products in the line actively competing with one another, and the manner in which they are priced will have a profound effect on their relative success. One of the basic questions facing manufacturers of a line of products involves determining the price differentials that should exist among the various substitutes items within the product line. This is an important consideration since buyers often consider the purchase of several closely related items within the sellers' line before making their selection. In fact, the seller often encourages such a comparison by the manner in which he represents his sales messages. Consequently, the manufacturer should develop price relationships between the various items in his product line that encourage such a comparison.

Other pricing policies are important in specific situations. These include price lining, customary pricing, psychological pricing and promotional pricing.

Price lining is the practice of offering products or services to the market at a limited number of price points. The price line policy was established by sears in their China department.

When customers expect to pay certain specific prices for products and services, these prices are said to be customary. Many convenience goods such as soft drink, candy and chewing gum have customary prices and it is almost impossible for a seller of these products to ignore them, such a condition is often the result of price lining since buyers become use to well-accepted price lines. Many customary prices and price-lining to the extent that it creates customary prices, are but two examples of psychological pricing.

Psychological pricing involves developing prices for products or services that have more appeal to customers than do others. Prestige products can often be created by charging vary high prices, whereas 'bait' pricing involving extremely low prices can be use to lure

customers to the point of purchase so that they can later be 'traded' up to higher price merchandise.

Closely related to psychological pricing is the area of promotional pricing. Special sales, premiums, trading stamps, combination offers, free goods and trade in allowances are examples. While certain of these efforts may be classified as tools of non-price competition, to the extent that the net effect is the same as a price reduction, they may well be better classified as promotional pricing.

## **2.9 PROCEDURE IN PRICE DETERMINATION**

The following procedure can be used in the determination of price.

- (1) Estimating demand for the product. Two steps are involved:
  - (a) To determine the price at which the consumers consciously or unconsciously value the product.
  - (b) To estimate the sales volume of different price, that is, considering the elasticity of the product.
- (2) Anticipating competitive reactions.
- (3) Establishing expected share of the market. This deals with the expected share of the market the company expects to capture.
- (4) Selection of price strategy. The strategy selected should be one that may be employed to achieve the expected market share.
- (5) Consider the company's marketing policies with regards to the product itself, promotion and distribution system.
- (6) Selection of a specific price. Most of the approaches to price setting are based on one of the following methods.
  - (a) Where prices are based on total cost-plus desired margin.
  - (b) Where prices are based on a balance below estimates of market demand and

cost of production and marketing.

- (c) Where price are set by considering the competitive market position such as prices which could meet competition.

## **2.10 PRICING DETERMINANTS**

There are a number of basic determinants which shape and constraint the pricing process.

### **(1) Level of Market Demand**

All pricing decisions are in the end dependent on the level of market demand, and on what the market will bear.

### **(2) Nature of Market Competition**

The more competitive a market is, the more competitive will be the pricing policies pursued by the suppliers in that market. Ultimately, a market can develop into a market can develop into a state of what economists call “perfect” competition, in which market competition leads to prices being established at the point at which supply equals demand.

Certainly, the room for price variation on the part of anyone supplier will depend on pricing expectations in the market. Suppliers will have to estimate the reaction of their competitors to any change in price that they wish to make. And they will have to forecast the reaction of customers to such price changes. This is called price elasticity of demand. A price increase which is not fully matched by the competition will immediately put any one supplier at a disadvantage, whilst a cut in price may result in cut throat competition all around. There is no guarantee that such competition will result in a significant increase in consumer demand, especially when the consumer equates price and quality. Low price may be perceived as a reflection of low quality.

### **(3) Customer Types and Market Segments**

Where customers can be clearly differentiated by segments, then the products positioned on these target segments should be appropriate to the particular demand requirements and usage contexts associated with the segments. Price may be only one of a number of relevant factors which determine the nature of segment demand, and influence the acceptability of products targeted on that demand. For instance, a market which emphasizes product availability, reliability and after sales services may rate price as a relatively less important factor when comparing the available alternatives.<sup>27</sup>

(4) Consumer Behaviour and Perceptions

Research into consumer and buyer attitudes perceptions and behaviour will show three things.

- (a) The relative importance of product price in determining the outcome of actual purchase behaviour.
- (b) The relative importance of product price in shaping consumer or buyer attitudes towards particular products or purchase situations.
- (c) The relative role of product price in shaping basic consumer perceptions of value for money.

Generalizations about consumer sensitivity to price are usually inappropriate, not only because they ignore market segmentation, but because they ignore the variety of consumer and buyer attitudes towards price. Some consumers equate low price with value for money. Others relate the quality, reliability or availability of products to their price and arrive at an entirely different perception of value for money.

## **2.11 APPROCHES TO PRODUCT PRICING**

Products go through a life cycle. A products life cycle can generally be divided into 4 stages viz:-

- (a) Introduction
- (b) Growth
- (c) Maturity
- (d) Decline

For any product to succeed in a given market, it should be priced in line with the stage it finds itself. Below is a figure showing a product life cycle and profit cycle

Stages in the product life cycle and profit cycle

## **2.11. Pricing New Product**

A marketing executive with a new product may be asking for disaster if he fixes a price above the price of a well accepted better known competitive product. For a company entering an already established market, the price of a functionally identical product is determined by existing prices of established competing products.

The most difficult problem of pricing a new product occurs when the product is unique that is, it is functionally dissimilar from any other product. This is so because the market is undefined, potential users or uses of the product are unknown and no comparable market experience exist, no channels of distribution, mark-up and no production and market cost experience.

At the introductory stage of a product, company marketing executive can use either intuitive, systematic or stimulation pricing approach. The intuitive approach involves the decision makers' subjective assessment of information available from which, more by intuition than design, a price can be set. While the systematic approach involves a sequence of steps such as estimates demand, market target etc. The stimulation approach on the other hand determines a new products price through mathematical models.

Dean, J.<sup>28</sup> is of the opinion that the strategic decision in pricing a new product is the choice between a policy of high initial prices that skim the cream of demand or a policy of low prices from the outset serving as an active agent for market penetration.

### **2.11.2 Pricing Growth Stage Products**

As product graduates from introduction to growth stage, its demand also grows until it reaches maturity stage. Normally there might be a wide range of market prices early in the stage, but this range narrows as the product approaches maturity.

### **2.11.3 Pricing a matured Product**

As a product moves into the maturity stage, it is desirable if not necessary to review its past pricing decision and determine the desirability of a new price change.

### **2.11.4 Pricing Products in Decline Stage**

Three strategies can be used in this stage. The first is to reformulate drastically the product and sell it at a much lower price. Secondly, a substantial price reduction may be a temporary revival of sales.

Finally, if all the above strategies failed to make any significant impact on sales, additional profit might still be wrought out of declining products if the producer withdraws advertising support, thus formally accepting the status of the product.<sup>29</sup>

However, products life cycle vary in line with the place they are. A product at a decline stage in say Europe, might beat its introductory stage in developing countries. Marketers hence have the tasks of monitoring these and pricing such products in the line with their markets and life cycle.

## **2.12 INITIATING AND RESPONDING TO PRICE CHANGES**

After developing their price strategies and structures, companies can initiate price changes either as cuts or raise prices.

### **2.12.1 Initiating Price Cuts**

Several circumstances might lead a firm to cut its price, even though this might provide a price war.

Kotler, P.<sup>30</sup> identified three circumstances that might lead a firm to do so.

#### **(a) Excess Capacity**

Here the firm needs additional business and cannot generate it through increased sales effort, product improvement, or other alternative measures. In the late 1970s,

various companies abandoned “follow the leader pricing” and turned to “aggressive pricing” to boost their sales. But in initiating a price cut in an industry with high fixed costs, high contribution margins, and excess capacity, a price cut may lead to a price war as competitors try to hold on to their market share.

(b) Falling Market Share

This is usually in the face of vigorous price competition.

(c) Drive to dominate the Market through lower Costs

The company could either start with lower costs than its competitors or it initiates price cuts in the hope of gaining market share which would lead to falling costs through larger volume.

People express waged, an aggressive low-price strategy and gained a large market share. But this strategy also involves high risks and could be in a form of three traps.

(i) Low-quality Trap – Consumers will assume that the quality is below that of a higher priced competitors.

(ii) Fragile Market-Share Trap – A low price buys market share but not market loyalty. Consumers will shift to the next lower price firm that comes along.

(iii) Shallow Pockets Trap – The higher priced competitors may cut their prices and have longer staying because of deeper cash reserves.

Companies usually consider cutting prices in a period of economic recession only fewer consumers are willing to buy higher priced versions of a product.

### **2.12.2 Initiating Price Increases**

Many companies have had to raise prices. They do this knowing that the raised price will be resented by customers, dealers and the company’s own sales force. Yet a successful price increase can increase profit considerably.

A major circumstance provoking price increases is the occurrence of cost-inflation. Rising costs unmatched by productivity gains squeeze profit margins and lead companies to regular rounds of price increases companies often raise their prices by more than the cost increase in anticipation of further inflation or government price controls, this is called anticipatory pricing.

Another factor leading to price increase is over demand. When a company cannot supply all of its customers need, it can raise its prices, put customers on allocation on both. The real price can be increased in several ways, each with a different impact on buyers. The following price adjustments are common.

(i) The company decides not to set its final price until the product is finished or delivered. Delayed quotation pricing is prevalent in industries with long product lead times.

(ii) Use of Escalator Clauses

The company requires the customer to pay today's price and all or part of any inflation increase that takes place before delivery. Escalator clauses are found in many contracts involving industrial projects of long duration.

(iii) Unbundling of Goods and Services

The company maintains its price but removes or prices separately one or more elements that were part of the former offer, such as free delivery or installation.

(iv) Reduction of Discounts

The company reduces its normal cash and quantity discounts and instructs its sales force not to offer off-list pricing to get the business.

In passing price increases on to the customers, the company needs to avoid acquiring the image of price gouger. The price increases should be supported with company communications explaining to customers why prices are being increased.

### **2.12.3 Buyers' Reactions to Price Changes**

Customers do not always put a straight forward interpretations on price changes.

A price cut can be interpreted in the following ways:

- (i) The item is about to be replaced by a later model.
- (ii) The item has some fault and is not selling well.
- (iii) The firm is in financial trouble and may not say in business to supply future parts.
- (iv) The price will come down even further and it pays to wait.
- (v) Or the quality has been reduced.

A price increase which would normally deter sales may carry some positive meaning to the buyers.

- (i) The item is very 'hot' and may be unobtainable unless it is bought soon.
- (ii) The item represents an unusually good value.
- (iii) Or the seller is greedy and is charging what the traffic will bear.

Buyers' reactions to price changes also vary with their perception of the products cost in relation to their total expenditures. Buyers are most price sensitive to products that cost a lot and or are bought frequently, where as they hardly notice higher prices or small items that they buy frequently. In addition, buyers are normally less concerned with the products price than the total costs of obtaining operating and servicing the product.

### **2.14.4 Competitors' Reactions to Price changes**

A firm contemplating a price change has to worry about competitors as well as customers' reactions. Competitors are very likely to react where the number of firms is small, the product is homogenous and the buyers are highly informed.

A competitor may interpret a price cut in the following ways:

- (a) A competitor can surmise that the company is trying to steel the market.
- (b) That the company is doing poorly and trying to boost its sales.

- (c) Or that the company wants the whole industry to reduce prices to stimulate total demand.

Where there are several competitors, the company must estimate each competitor's likely reaction. If all the competitors behave alike, this estimate amounts to an analysis of a typical competitor.

If the competitors do not react uniformly because of critical differences in size, market shares or policies then separate analysis are necessary.

#### **2.12.4 Responding to Price Changes**

This deals with how a firm should respond to a price change initiated by a competitor. In market characterized by high product homogeneity, the firm has little choice but to meet a competitor that cuts its price. As such the firm should search for ways to differentiate its own augmented product, but if it cannot find any, it will have to meet the price reduction.

When a competitor raises its price in a homogeneous product market, the other firms may not match it. They will comply if the price increase will benefit the industry as a whole. But if one firm does not think that it or the industry would gain, its non-compliance can make the leader and the others rescind the price increase.

In non-homogeneous product markets, a firm has more latitude in reacting to a competitors price change. Buyers choose the vendor on a multiplicity of considerations, such as service, quality, reliability and other factors. These factors desensitize buyers to minor price differences.

Before reacting the firm needs to consider the following issues:

- (a) Why did the competitor change the price? Is it to steal the market, to utilize excess capacity, to meet changing cost conditions, or to lead an industry wide price change?
- (b) Does the competitor plan to make the price change temporary or permanent?

(c) What will happen to the company's share and profits if it does not respond?  
Are other companies going to respond? and

(d) What are the competitors and other firms responses likely to be each possible reaction?

Market leaders frequently face aggressive price cutting by smaller firms trying to build market share. When the attacking firms product is comparable to the leaders, the lower price will cut into the leaders share. The leader at this point has several options.

(i) To Maintain Price

The leader might maintain its price and profit margin, believing that:-

- (a) It would not lose much market share and
- (b) It could regain market share when necessary.
- (c) It would lose too much profit if reduced its price.

This action will cut its profits in the short run. Some firms may reduce their product quality, services and marketing communications to maintain profits, but this will ultimately hurt long-run market share. It is important that the company should maintain the value of its offer as it cuts prices.

(iv) Increase Price and Improve quality

The leader might raise its price and introduce some new brands to bracket the attacking brand.

(v) Lunch Low Price Fighter Line

One of the best responses is to add lower price items to the line or to create a separate lower price brand. This is necessary if the particular market segment being lost is price-sensitive, since it will not respond to arguments of higher quality.

The Company under attack has to consider the products stage in the life cycle, its importance in the company's product portfolio, the intentions and resources of the

competitor, the price and value sensitivity of the market, the behaviour of costs with volume, and the company's alternative opportunities.

### **2.13 METHOD OF SETTING PRICES**

Companies can select a price based on the demand schedule, cost function, and competitor's prices. The price is usually somewhere between one that is too low to produce a profit and one that is too high to produce any demand.

There are three major considerations in price setting. Product costs which set a floor to the price. Competitors' prices and the prices of substitutes provided an orienting point that the company has to consider in setting its price, and unique product features in the company's offer which establishes the ceiling on its price.

Companies resolve the pricing issue by selecting a pricing method that includes one or more of these three considerations hoping that the pricing method will then lead to specific price. The price setting methods are as follows:-

#### **2.13.1 Mark-up Pricing**

This is the most elementary pricing method and it involves adding a standard mark-up to the cost of the product.

Mark-ups vary considerably among different goods. Mark-up pricing only works if that the price actually brings in the expected level of sales. Still mark up pricing remains popular for a number of reasons.

First, sellers have more certainty about costs than about demand. By trying the price to cost, sellers simplify their own pricing task, and they do not have to make frequent adjustments as demand changes.

Second, where all firms in the industry use this pricing method, their prices tend to be similar. Price competition is therefore minimized, which it would not be if firms paid attention to demand variations when they priced.

Third, many people feel that cost-plus pricing is fairer to both buyers and sellers. Sellers do not take advantage of buyers when the latter demand becomes acute, yet the sellers earn a fair return on their investment.

### **2.13.2 Target Return Pricing**

This is another cost oriented pricing approach. Here the firm determines the price that would yield the target rate of return on investment. Target pricing is used by General Motors, which prices its automobiles to achieve a 15 to 20 percent profit on its investments. This pricing method is also used by public utilities that are constrained to make a fair return on their investment.

### **2.13.3 Perceive-Value Pricing**

An increasing number of companies are basing their price on the products perceived value. They see the buyers perception of value not the sellers cost, as the key to pricing. They use the non-price variables in the marketing mix to build up perceived value in the buyers minds. Price is set to capture the perceived value.

The key to perceived-value pricing is to accurately determine the markets perception of the offers value. Sellers with an inflated view of the value of their offer will over price their product. Or they might underestimate the perceived value and charge less than they could. Market research is needed to establish the market's perception of value as a guide to effective pricing.

### **2.13.2 Going Rate Pricing**

In this type of pricing, the firm bases its price largely on competitors' price, with less attention paid to its own cost or demand. The firm might charge the same, more or less than its major competitor(s). In Oligopolistic industries that sell a commodity such as steel, paper, or fertilizer, firms normally charge the same price. The smaller firms follow the leader. They charge their prices when the market leaders' prices change rather than

when their own demand or cost changes. Some firms may charge a slight premium or slight discount, but they preserve the amount of difference.

### **2.13.5 Seale-Bid Pricing**

Competitive-oriented pricing also dominates where firms bid for jobs. The firm bases its price on expectations of how competitors will price rather than on a rigid relation to the firm's cost or demand. If the firm is to win the contract, it will require pricing lower than other firms. Yet the firm cannot set its price below a certain level. It cannot price below cost without worsening its position. On the other hand, the higher it sets its price above its cost, the lower its chance of getting the contract. The net effect of the two opposite pulls can be described in terms of the expected profit of the particular bid.

Using expected profit as a criterion for setting price makes sense for the large firm that makes many bids. In playing the odds, the firm will achieve profits in the long run. The firm that bids only occasionally or needs a particular contract badly will not find it advantageous to use the expected profit criterion.

## **2.14 FACTORS INFLUENCING PRICE DETERMINATION**

The same general procedure is followed in pricing both new and established products. However, the pricing of an established product usually involves little difficulty, because the exact price or a narrow range of prices may be dictated by the market. In pricing of new products, though, the decisions called for throughout the pricing process typically are important and difficult.

In the price determination process, several factors usually influence the final decision. The key factors that should be considered are as follows:-

### **2.14.1 Demand for the Product**

This is an important factor in pricing a product. This requires estimating the total demand of the product. This is easier in the case of an established product than for a new one. The practical steps in demand estimation are:-

First, to determine whether there is a price that the market expects and, secondly to estimate the sales volume at difference prices.

Demand can be related to pricing by considering aggregate demand, buyers' price acceptance and price elasticity of demand producers usually forecast what aggregate demand would be in the next planning period, and then base their planning of production and pricing decision on such forecasts. Anticipated increase would lead to an increase in price and anticipated decreased would force down the price with all things being equal.

### **2.14.2 Target Share of Market**

The market share targeted by a company is a major factor to consider in determining the price of a product or service. A company striving to increase its market share may price more aggressively (lower base price, larger discounts) than a firm that wants to maintain its present market share

The expected share of the market is influenced by present production and cease of competitive entry.

### **2.14.3 Competitive Reactions**

Present and potential competition is an important influence in determining a base price. Even a new product is distinctive for only a limited time, until the inevitable competition arrives. The threat of potential competition is greatest when the field is easy to enter and the profit prospects are encouraging. Competition can also come from three other sources.

- (a) Directly similar products.

- (b) Available substitutes.
- (c) Unrelated products seeking the same consumer dollar.

Profit oriented pricing goals are particularly susceptible to competitive reactions. On the other hand, in a company with statusquo pricing goals, management is likely to set its price at the competitive level.

#### **2.14.4 Cream-Skimming Pricing Versus Penetration Pricing**

In pricing, a product, especially a new product, management has to consider whether to enter the market with a high price or a low price. These opposite alternatives are popularly referred to as skim-the-cream pricing and penetration pricing.

The nature of the potential competition will critically influence management's choice between the two pricing strategies. If competitors can enter a market quickly, and if the market potential for the product is very promising, management would probably adopt a policy of penetration pricing. Low initial pricing may do two things. First, it may discourage other firms from entering the field. The required investment in production and marketing may be too great relative to the anticipated low profit margin. Secondly, low initial pricing may give the innovator such a strong hold on its share of the market that future competitors cannot cut into it.

On the other hand, cream skimming may be more feasible where the market is not large enough to attract the big competitors. While percentage margins may be attractive, the total Naira profits could be too small to attract larges.

#### **2.14.5 Other Parts of the Marketing Mix**

In the course of determining the base price, management should consider the other major parts of its marketing mix.

##### **(a) The product**

The price of a product is influenced substantially by whether it is a new item or an older, established one. There is little price competition among manufacturers of

packaging or producers of industrial gases, and a stable price structure exists. These industrial products are only an incidental part of the final article, so customers will buy the least expensive product consistent with their required quality. In another product situation, a manufacturer will charge a lower price for a product sold under a middleman's brand than for the same product sold under that manufacturer's brand. The reason is that the middleman's branded item costs less to produce.

(b) Channels of Distribution

The channels selected and the types of middlemen used will influence a manufacturer's pricing. A firm selling both through wholesalers and directly to retailers often sets a different factory price for each of these two classes of customers. The price to wholesalers is lower because they perform activities such as services that the manufacturer otherwise would have to perform itself. Such activities could be providing storage, granting Methods.

The promotional methods used, and the extent to which the product is promoted by the manufacturer or middlemen, are still other factors to consider in pricing. If major promotional responsibility is placed upon retailers, they ordinarily will be charged a lower price for a product than if the manufacturer advertises it heavily. Even when a manufacturer promotes heavily, it may want its retailers to use local advertising to tie in with national advertising such a decision should be reflected in the manufacturer's price to these retailers.

**2.14.6 Other Factors**

(a) A firm's pricing can also be influenced by the government policy as expressed in the extent and proposed legislation in such areas as price maintenance or price control or monopolistic practices. Also a firm's pricing policy is influenced by the nature and extent of its corporate resources.

(b) Shortage, inflation and recession or a general less favourable economic condition can also affect pricing strategy.

(c) Government rules and regulations.

## **2.15 TYPES OF PRICING STRATEGIES**

A company launching a new product can choose any of the following strategies.

### **2.15.1 Skimming Pricing Strategy.**

This is also known as skim-the-cream pricing strategy. This involves setting a price that is high in the range of expected prices. That is when a product is sold at a highest possible price, it is said to be sold at skim-the-cream pricing. The price is maintained until the cream has been skimmed off another pricing level. When a company changes a high price at the introductory stage of a product it must be coupled with heavy promotion. As the product move through its life cycle, the firm lowers its price to reach successively larger market segment.

The propose of skimming pricing strategy is:

1. To get the greatest early revenue from sales to recover product development cost before competitors enter the market.
2. It is often used by small firms with a large development cost and good reputation.
3. Skimming works only a product or services is distinctive or when a firm has some protection from competition, such as a strong patent or a technology lead.

Edward <sup>31</sup> (1977) stated that skimming pricing is successful when demand is relatively inelastic in the upper range of the curve. A successful skimming strategy enable the producer to recover its product development and production cost quickly.

Naturally, a skimming strategy will encourage potential competition skimming pricing strategy makes sense under the following conditions.

- (a) A sufficient number of buyers have a high current demand.

- (b) The unit costs of production of a small volume are not so much higher that they cancel the advantage of charging what the traffic will bear.
- (c) The high initial price will not attract more competitors.
- (d) The high price supports the image of a superior product.

The skim-the-cream pricing strategy is particularly suitable for new product because.

1. In the early stages of a product's life cycle, price is important, competition is minimal, and the product's distinctiveness lends itself to effective marketing.
2. This strategy can effectively segment the market on an income basis. At first, the product is marketed to that segment that responds to distinctiveness and exclusiveness in a product and is relatively insensitive to price. Later, the seller can lower the price and appeal to segments of the market that are highly sensitive to price.
3. This strategy acts as a strong hedge against a possible mistake in setting the price. If the original price is too high, and the market does not respond, management can easily lower it, but it is very difficult to raise a price that has proven to be too low to cover costs.
4. High initial prices can be used to keep demand within the limits of a company's productive capacity.

However, a notable drawback of this strategy is that it tends to result in higher retail price where there are many middlemen in the channel of distribution.

### **2.15.2 Penetration Pricing Strategy**

In this strategy, a low initial price is set to reach the mass market immediately. This strategy can also be employed at a later stage in the productive cycle.

Penetration pricing strategy is likely to be more satisfactory than cream-skimming pricing strategy. When the following conditions exist:-

1. The quantity sold is highly sensitive to price. That is the product has a highly elastic demand.
2. Substantial reductions in unit production and marketing costs can be achieved through large-scale operations.
3. The product is expected to face very strong competition soon after it is introduced to the market.
4. The high income market is not large enough to sustain a skim-the-cream price.

The nature of the potential competition will critically influence management's choice between the two pricing strategies. If competitors can enter a market quickly, and if the market potential for the product is very promising, management probably should adopt a policy of penetration pricing. Low initial pricing may also do two things.

First it may discourage other firms from entering the field. The required investment in production and marketing may be too great relative to the anticipated low profit margin. Second, low initial pricing may give the innovator such a strong hold on its share of the market that future competitors cannot cut it.

### **2.5.3 Meeting Competition Strategy**

In addition to penetration and skimming strategies there is a third basic strategy called meeting competition. If the firm meeting competition as its pricing goal, the strategy is quite simple. The price charged is identical or very close to that of the competition. The objective of this type of strategy is to sell goods below the going market price and it will be possible only if there is evidence that customers will be attracted to a cost saving.

This type of pricing strategy is similar to the following – The leader strategy. It had the advantage of simplicity. A notable drawback of this strategy is that it ignores demand or cost or both.

## **2.16 PRICE ADJUSTMENTS**

Companies adjust their price to account for various customer differences and charging situational factors. The adjustment in the basic price is to reward customers for certain acts, such as early payment of bills, volume purchases and buying off season. These price adjustments are called discounts and allowances.

### **2.16.1 Discounts**

The price charged on a product may be altered or allowed through the use of discounts. Although the policy of offering discount is commonly adopted in distributive trade, it is also important to, and could be adopted in a manufacturing company. It plays a more important role in consumers buying decision making now than hitherto. Discounts take a variety of forms and have several different objectives. The common types of discounts are Cash discount, quantity discount, special promotional discounts and seasonal discount.

#### **(a) Cash discount**

A cash discount is a price reduction or deduction granted to buyers who pay their bill within a specified period of time. The discount is computed on the net amount due after first deduction trade. A typical example is “2/10, net 30”, which means that payment is due within 30- days but the buyer can deduct 2 percent from the cost by paying the bills within 10 days. The discount must be granted to all buyers meeting these terms. Such discounts are customary in many industries and serve the purpose of improving the seller’s liquidity and reducing credit collection costs and bad debts.

Every cash discount includes three elements.

1. The percentage discount itself.
2. The time period during which the discount may be take and
3. The time when the bill becomes overdue.

(b) Quantity Discounts

A quantity discount is a price reduction to buyers who may buy large volumes. The discounts are based on the size of the purchase, either in naira or in units. Quantity discounts must be offered to all customers and must not exceed the cost savings to the seller associated with selling large quantities. They may be offered on a noncumulative basis or a cumulative basis.

Anoncumulative discount is based upon the size of an individual order of one or more products. This is expected to encourage large orders.

Cumulative discounts are based on the total volume purchase over a period of time.

Discounts provide an incentive to the customer to buy more from a given seller rather than buying from multiple sources.

Quantity discounts can help a manufacturer effect real economics on production as well as in selling. Large order can result in lower cost production runs and lower transportation costs.

(c) Functional Discounts

This is also called trade discounts which are offered by the manufacturer to trade channel members if they will perform certain functions such as selling, storing and record keeping. Manufacturers may offer different functional discounts to different trade channels because of the varying services they perform, but manufacturers must offer the same functional discounts with each trade channel.

(d) Seasonal Discounts

According to Kotler, P<sup>32</sup> seasonal discounts are a price reduction to buyers who buy merchandise or services out of season. Seasonal discounts allow the seller to maintain steadier product during the year.

### **2.16.2 Allowances**

Allowances are other types of reductions from the list price. For example, trades in allowances are price reductions granted for turning in an old item when buying a new one. Trade – in allowances are most common in the automobile industry and are also found in some other durable goods categories.

An other example of allowances is the promotional allowances which are payments or price reductions to reward dealers for participating in advertising and sales support programs.

## **2.17 LEGAL ISSUES IN PRICE ADJUSTMENTS**

Discounts and allowances may result in different prices for different customers. Whenever price differentials exist, there is price discrimination. In certain situations, price discrimination is prohibited by the Robunson – Patman Act. This is one of the most important federal laws affecting a company's marketing program.

The Robins-Patman Act was intended to curb the practices of large scale retailers only. It was written in such general terms, however, that through the years it has also become applicable to manufacturers.<sup>33</sup>

### **2.17.1 Price Discrimination**

The law prohibits price discrimination between different purchases of products of like grade and quality if this discrimination may substantially injure competition.

- (1) With the person who grants or the person who receives the discriminatory price or.
- (2) With customers of either if these people.

(i) Injury to Competition- Not all price differentials are illegal under the Robinson-Patman Act. Price differentials are considered to be unlawfully discriminatory only when their effect may be to substantially lessen competition. In other words, a price differential is allowed if it does not substantially reduce competition.

(ii) Other Exceptions and Defenses – Price differentials are allowed in response to changing conditions that affect the market for or the market ability of goods. For example, differentials are allowed in response to seasonal obsolescence, physical deterioration of products, or going-out-of-business sales.

Price differentials may be granted if they do not exceed differences in the cost of manufacture, sale or delivery that result from:

(a) From the differences in the quantity sold or

From different methods of sale or delivery of the product.

Such differentials are allowed even though there is a reasonable probability of injury to competition. This cost proviso” is a main defence to firms engaging in differential pricing.

(iii) Buyers’ Liability- The Robinson-Patman Act includes an innovation on trade regulation. The buyer is as guilty as the seller if the buyer knowingly induces or receives an unlawful price differential. This provision is intended to restrain large-scale buyers from demanding discriminatory prices. Prior to the Robinson-Patman Act, a seller who succumbed and granted the differential could be found guilty, and the pressuring buyer would go free.

In general the interpretation of this provision have shown that it is largely ineffectual retaining buyers from a practical stand point, it has been difficult to prove that the buyer knowingly received an unlawful price differential. The buyer cannot be expected to have access to the seller’s accounting records.

(iv) Brokerage Payment - The Robinson Patman Act tackles the problem of unearned brokerage Payment: by declaring that it is unlawful to pay or receive brokerage allowances except for services rendered. Essentially, it is illegal for a seller to pay brokerage fees directly to a buyer or to anyone controlled by the buyer.

Prior to the Robinson Patman Act, it was common practice for seller to grant buyer the usual brokerage commission. The seller was granting a form of discount to the customers in return for their performance of functions that the seller would otherwise have to provide. This is generally no longer legal.

(v) Promoted Allowance – Various types of promotional services and difficulties are lawful under the Robinson Patman Act only if they are offered to all competing customers in proportionally equal terms. However, the problem here is to determine what is meant by “Proportionally equal terms”.

### **2.17.2 Legality of Quantity Discounts**

Quantity discount results in different prices to different customers. Consequently, these differential or discriminatory prices are potentially illegal under the Robinson Patman Act if the necessary injury to competition can be shown.

Quantity discounts are legal if the resultant price differentials do not exceed differences in the cost of manufacturing, selling or delivering various quantities of the product. The price differentials may be less than the cost savings, but they must not exceed the differences in cost.

### **2.17.3 Legality of Trade Discounts**

There is no specific statement about trade discounts in the Robinson Patman Act. Consequently, the legal status of trade discounts is still a little fuzzy. Trade discounts are legal under the Robinson Patman Act if they are genuinely offered to different classes of customer in return for services rendered.

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## CHAPTER THREE

### 3.0 RESEARCH METHODOLOGY

In this research quasi research method was used. This method was used because the subject matter is sociological in nature, as it deals with human beings and their behaviour. The human behaviour which is the independent variable is not subjected to strict control as obtained in experimental designs, as such questionnaires, personal interviews and desk research were used in obtaining the responses of the patients and other health workers.

This method was chosen so as to get an insight into the effect of pricing on the consumption of pharmaceutical products, a case study of A.B.U. Teaching Hospital, Zaria.

Desk research in which existing and documented information about the pricing activities of the hospital was used.

Questionnaires were administered to medical doctors, pharmacists, nurses, other health workers and patients.

Personal interviews were also conducted especially in situations where further clarification on vital issues was required. The desire for personal interview was brought about by the desire to reconcile certain information already existing in documented form with what respondents feel currently and secondly because of the deficiency of questionnaires in terms of space. The above methods used in the collection of data are known as the primary sources.

The secondary sources included the use of textbooks, magazines, publications on pricing procedure, relevant articles in journals, business newspapers and other publications on the library relating to pricing.

The secondary sources was necessary because of the need to diversify into those areas where the use of primary date cannot give through analysis.

### **3.1 METHOD OF DATA COLLECTION AND ANALYSIS**

The data used in this study was collected from the Pharmacy Department of Ahmadu Bello University Teaching Hospital, Zaria from January, 1994 to December, 1996 (3 years). Both out-patients and in patients prescriptions were used to give the consumption rate of drugs for that given period. The data collected was then analysed to show the effect of price on the consumption of the Pharmaceutical products (drugs) in the Hospital. Data was also collected from the questionnaire sent to the Doctors/Nurses, Pharmacist and patients.

The questionnaires were in printed form containing questions to be answered. Although questionnaires seek specific information about defined problems, people unlike machines are bound to respond differently to the same stimulus. The questionnaires were collated, analysed and interpreted in line with people's responses. The method used in analyzing the data that was collated is quantitative based on statistical percentages. This method was used for the purpose of comparing and grouping people with similar reactions to a particular question so as to know whether to accept or reject a hypothesis.

### **3.2 CASE SELECTION**

Ahmadu Bello University Teaching Hospital, Zaria was selected for this study because of easy accessibility of data, as the researcher is a staff of the Hospital and could get a lot of first hand and detailed information without too much difficulty. This study, therefore is a combination of the result of data analysed and the researchers personal experiences on the consumption of the pharmaceutical products in the Hospital.

### **3.3 PERIOD COVERED**

This study attempts to discuss the effects of pricing on the consumption of Pharmaceutical products in Ahmadu Bello University Teaching Hospital. The study

covered a period of 3 years from January 1994 to December, 1996. Price of Pharmaceutical products was introduced in the hospital in March, 1991. From 1991 to 1994 drugs were readily available in the hospital. But by 1995 stock level of drugs had started to go down. This enabled the study to take into account the effect of pricing on the consumption of pharmaceutical products in the hospital.

### **3.3 GENESIS AND ORGANIZATION OF A.B.U. TEACHING HOSPITAL PHARMACY SHOPS.**

The economic problems that gripped the whole country seemed to have spilled over to the Teaching Hospitals. Money to run the hospitals was in short supply. It became increasingly difficult to purchase item including drugs. The little money available was not enough to purchase drugs to give to all patients as was the practice in the past. The alternative was to charge for drugs.<sup>1</sup>

In the Ahmadu Bello University Teaching Hospital, a decision was taken in May 1986 to establish a drug Resolving Fund (DRF) type operation with the sole purpose of charging patients for drugs. A committee was then set up to work out the mode of operation of such a venture. At first, Management of the hospital was skeptical about the ability of staff to run the system. It was therefore suggested that the operation be handed over to a private concern for maximum profitability. This idea was later shelve and management decided in favour of the hospital managing the business itself. The committee which was charged with the responsibility of setting up the project went to work and after several meetings, came up with a document detailing the operation of the DRF which it named "Hospital Pharmacy Shops" (or "Pharmacy Shops"). These shops were to be established in the three Hospitals of the Institute of Health which hospitals with drugs medical supplied, X- ray materials, and other consumables at reasonable prices and to supplement the efforts of the Institute of Health in providing these items for treatment of patients.

An initial capital of N100, 000.000 (One hundred thousand Naira) was made available for the purpose of running the shops. These shops were to be run strictly as a business enterprise; staffs were drawn from the pharmacy. Stores and Suppliers Radiology, and Accounts Departments. A bank for all the transactions was chosen and an account in the name of the pharmacy shops opened. The signatories for the account were appointed. Next, strategies a location within the hospital was chosen for sitting the pharmacy shops and arrangements were made to purchase drugs and other items for the shops. The list was drawn from the Institute of Health's Hospital Formulary. A tender was called for the initial purchase and attention was paid to drugs that were prescribed frequently.

The next important step was drawing up operating guidelines for "running the shops". In this manual the duties of each officer were carefully spelt out. The pharmacist was detailed as the officer in charge of the operations. The accounts department supplied the accounts clerks who were responsible for keeping of money at the shop. The stores department provided store keepers who would be responsible for keeping the stores and records. The manual also detailed the methods of transactions at the shops. The following points were stressed.

- (a) Persons wishing to buy drugs from the pharmacy shops must present prescriptions written by a doctor with prescribing privileges in the Institute of Health.
- (b) The shops operate only on cash basis.
- (c) Items not requiring prescriptions will be sold to patients registered with the hospital.
- (d) Items sold may not be returned to the Pharmacy Shops.

The manual contains standing instructions for banking Money collected would be banked daily or the next banking day. Cashiers were to ensure that all customers were issued with receipts for any purchase whatsoever.

Before opening of the shops, an orientation seminar was organized for all staff who would operate the business. Each person was told exactly what his or her role would be and each received a copy of the guidelines.

The shop opened in Zaria Hospital on June 22<sup>nd</sup> 1987, eleven months after the initial move to embark on the project. The shops in the other two hospitals (Kaduna and Malumfashi) were opened three months later. The idea was to learn from the experiences gathered in the Zaria operation so as to avoid problems which would have occurred at the initial stages of the operation. Indeed, this paid off as the opening and operation of the shop in these two hospitals were a lot smoother than in Zaria.

### **3.4 OPERATIONS OF A.B.U. TEACHING HOSPITAL PHARMACY SHOPS**

In Zaria, the operations began in a small room while a proper building was put up, The operations of the pharmacy shops are as follows:

#### **3.5. (I) Record Keeping at the Pharmacy Shops**

It is absolutely important that proper and accurate records are kept for all transactions at the shops. All sales are made only on presentation of a prescription of doctors working at the Hospital. The costing of each prescription is done by the pharmacies. The accounts clerk or cashier then numbers the prescription and issues a receipt in triplicate for the sale. The original copy goes to the customer, the duplicate is sent along with the original prescription to the dispensing pharmacist who then retains both documents. In addition, the information on the prescription to the dispensing pharmacist who then retains both documents. In addition, the information on the prescription and the receipt are entered in a record book. This record is expected to be

used to compare the total amount collected by the cashier. All prescriptions received at the pharmacy shops are numbered serially and filled as such. The receipts bear the numbers of the prescriptions filed.

### **3.5.2 Store Keeping**

This is a very important aspect of work at the pharmacy shops. It is absolutely necessary that all the records of receipts, issued are kept very accurately. Drugs and other materials are issued and from the store by the store keeper to the pharmacist in-charge. The pharmacists sign the record register and then adds the drug to issued stock for dispensing. The rules for store keeping, such as FIFO, must strictly adhered to since the shops are not expected to loose any drugs by expiry, determination neglect etc. At the end of every month a stock taking is carried out to determine the stock levels and which items need to be reordered. Store keepers employed to take charge of the stores must be honest and knowledgeable. The shops cannot afford to lose any drugs or items through pilfering.

### **3.5.3 Purchasing**

The initial stock was purchased by tender, thereafter items were replaced by direct purchase from the companies that won the items at the initial tender provided the prices remain competitive. It is important that the prices are not higher than the patients would pay outside the hospital, otherwise the whole purpose would be defeated, it is important also not to purchase large quantities for obvious reasons. This has its advantages and disadvantages. When too small a quantity of any item is purchased, it may be used up quickly and out of stock situation could arise, once again defeating the purpose of the concept which is to make essential drugs available at all times. Ideally, it should be easy to bring in any product into the shops within few hours. However, we do know that our delivery system in the country is faulty, coupled with the fact that telephones do not always work, otherwise, and orders could be phoned into a supplier

who could deliver the goods by the fastest possible means. The alternative is for the shops to have a reliable means of transport which can be used to collect and deliver orders.

Another important aspect of purchasing is the source. No doubt, it is best to purchase direct from manufacturers whenever possible. The advantage is that genuine drugs are purchased at the most reasonable prices. It is possible to negotiate with such companies to keep the prices steady for a given period. Also arrangements could be made to deliver specified quantities at specified times so that there is a constant flow of such products. Sometimes, it may be necessary to purchase items by cash. An arrangement is then made for an imprest to be given to the manager of the shop who must of course, give an account of how the money was spent. Such expenditures are for emergency items not available immediately at the shops and which may be required urgently by the customer or patient.

#### **3.5.4 Costing**

It has been argued by some that the drugs sold in DFR projects should be at cost. Others have gone as far as suggesting that sale should be subsidized. In other words, the items should actually be sold below cost, since the whole idea is to give. The fact is that if this happened, the whole project will be decapitalised and will not solve the problem of drug shortage in the hospitals. Since it is a business, there must be a margin of profit, it was then decided that a mark-up of 20% on all items was reasonable and would be enough to offset some of the expenses for running the shops. Where such a mark-up would result in a selling price higher than outside the hospital, a lower mark-up was applied, for certain drugs such as cytotoxic drugs, the mark-up was only 5%. This system has been applied so as to make it easy to work out the profit at the end of a given period. This is only theoretical as many other factors make it impossible to work out the profit exactly.

One problem with pricing is that with this fixed mark-up, item that cost higher may be sold at the old price and therefore could lead to a loss, to onviate this, it was decided that pricing would be done centrally. All items getting out of the central stores are marked with the selling price per unit on the package. In addition, a price list revised regularly accompanies the deliveries to the shops.

#### **3.5.4 Patient Counseling**

This is the advice given to patients on the use of drugs and is a very important aspect of patent care. Advise on the use of drugs has been acknowledge as crucial to the effectiveness of the drug and hence to the patients well-being<sup>3</sup>. Wrong use may result in unpleasant side effects and in extreme cases to fatalities. Correct use, on the other hand will enhance the efficacy of the drug and hence recovery from the illness being treated. Patients do not seem to be getting the advice they required because of a number of reasons such as:

- (a) Unavailability of the information.
- (b) Unwillingness of the medical personnel to offer information.
- (c) Too much attention being paid to the commercial aspect of health care to the detriment of the professional aspect.
- (d) Pharmacy personnel ignoring their traditional role as drug information Specialists.

## FOOTNOTES

1. OBIAGA, G.O. Drug Revolving Fund Scheme: A Teaching Hospital  
Experience Pharmacy Bulletin, No. 108 March/April 1990. A  
Publication of Pharmacy department A.B.U., Teaching  
Hospital, Zaria, P.229-230.
2. IBID – P. 233 – 236.
3. OBIAGA G.O. Advise for the Patient on the Use of Selected Medications  
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Pharmacy Department, A.B.U., Teaching Hospital, Zaria,  
P.263.

## CHAPTER FOUR

### PRESENTATION OF DATA AND ANALYSIS

Data collected is presented in the form of a table and each tabulated data is analysed.

To ease and enhance a clear and distinct comprehension the findings are analysed under two headings.

- (a) Analysis of the Data.
- (b) Analysis of the Findings.

#### 4.1 ANALYSIS OF DATA

As stated earlier data were collected from the Pharmacy Department (Pharmacy Shop) of Ahmadu Bello University Teaching Hospital, Zaria for a period of three (3) years (1994-1996). Also questionnaires were administered to the following categories of respondents.

- (a) Pharmacist and Pharmacy Assistants.
- (b) Doctors, Nurses and other Medical Workers.
- (c) The Patients

**4.1.1** Below are the tables showing the consumption rate and price of some selected pharmaceutical products.

##### (a) CO-TRIMONAZOLE TABLETS

	1994	1995	1996
Total Consumption/Tablet	76,000	87,000	67,000
Unit Price	N0.93	N0.93	N1.25
Total Sales	N30,400.00	N80,910.00	N86,250.00
Total Purchase per tablet	78,000	95,000	59,000

##### (b) TETRACYCLINE CAPSULES

	1994	1995	1996
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Total Consumption/Capsule	44,000	43,000	30,000
Unit Price	N0.47	N0.90	N1.47
Total Sales	N20,680.00	N38,700.00	N44,100.00
Total Purchase per Capsule	50,000	37,000	30,000

**(c) GENTAMICIN INJECTION**

	1994	1995	1996
Total Consumption/Ams.	19,800	227000	13,500
Unit Price	N5.10	N6..16	N6.32
Total Sales	N100,980.00	N139,832.00	N85,3200.00
Total Purchase per Capsule	21,800	20,700	14,000

**(d) ALHA METHYL DOPA TABLETS**

	1994	1995	1996
Total Consumption/Tablet .	70,000	39,000	44,000
Unit Price	N2.00	N4.25	N5.75
Total Sales	N140,000.00	N165,750.00	N253,000.00
Total Purchase per Capsule	54,000	39,000	44,000

**e) PROCAINE PENECILIN INJECTION**

	1994	1995	1996
Total Consumption/Vial.	3,500	3,900	800
Unit Price	N10.23	N27.15	N31.49
Total Sales	N15,805.00	N105,885.00	N25,192.00
Total Purchase per Capsule	4,000	3,500	7,000

4.1.2 Ten questionnaires were sent to the Pharmacist, ten to Doctors, Nurses and Medical Technologists, ten to patients. About twenty questionnaires were sent out and all of these questionnaires were returned, and none was damaged. All this questionnaires were only distributed in A.B.U. Teaching Hospital, Zaria.

Below are the tables of the Pharmacist/Pharmacy Assistants responses to the various questions in the questionnaire.

**TABLE 1 – QUESTION 3**

**OBJECTIVE OF THE HOSPITAL PHARMACY SHOP**

OBJECTIVE	Number of Respondents	Weighted Percentage
Profit Maximization	1	10
To meet Patients need	7	70
Orders (specify)	2	20
TOTAL	10	100

**TABLE 2 – QUESTION 4**

**PRICING OBJECTIVE OF THE HOSPITAL PHARMACY SHOP**

PRICING OBJECTIVE	Number of Respondents	Weighted Percentage
Profit Maximization	0	0
To make drugs readily available	4	40
To make drugs affordable	55	50
Others (specify)	1	10
TOTAL	10	100

**TABLE 3: QUESTION 5**

**SELLING TERMS OF THE PHARMACY SHOP**

SELLING TERMS	Number of Respondents	Weighted Percentage
Cash and carry	8	80
Credit for a period less than 10 days	1	10
Credit to any credit worthy patient	1	10
TOTAL	10	100

**TABLE 4 – QUESTION 6**

**SELLING ON CREDIT**

SELLING ON CREDIT	Number of Respondents	Weighted Percentage
Yes	3	30
No	7	70
TOTAL	10	100

**TABLE 5 – QUESTION 8**

**PURCHASE OF DRUGS BY THE PHARMACY SHOP**

SELLING ON CREDIT	Number of Respondents	Weighted Percentage
Monthly	0	0
Quarterly	9	90
Annually	1	10
TOTAL	10	100

**TABLE 6 – QUESTION 9**

**OBTAINING OF THE DRUGS**

PRICING OBJECTIVE	Number of Respondents	Weighted Percentage
Directly from the Company	1	5%
Through Medical Sales Rep. Representatives	5	25%
Through Company's Distributing Agents	9	45%
Others (specify)	5	25%
TOTAL	10	100

**TABLE 7 – QUESTION 10****PRICES OF DRUGS PURCHASED FROM MIDDLE MEN**

OBJECTIVE	Number of Respondents	Weighted Percentage
Too High	4	40
Moderate	5	50
Others (specify)	1	10
TOTAL	10	100

**TABLE 8 – QUESTION 11****PRICES OF DRUGS PURCHASED DIRECTLY FROM COMPANY**

PRICES OF DRUGS	Number of Respondents	Weighted Percentage
Too High	0	0
Moderate	8	80
Others (specify)	2	20
TOTAL	10	100

**TABLE 9 - QUESTION 12****EFFECT OF CHANGE OF PRICES ON SALES OF DRUGS**

CHANGE OF PRICE ON SALE	Number of Respondents	Weighted Percentage
Strongly	1	10
Very strongly	4	40
Moderately	3	30
No effect	0	0
TOTAL	10	100

**TABLE 12 – QUESTION 16**

COMPLAINTS	Number of Respondents	Weighted Percentage
Yes	9	90
No	1	10
TOTAL	10	100

**TABLE 13 – QUESTION 18**

## AVAILABILITY OF DRUGS IN PHARMACY SHOP

AVAILABILITY	Number of Respondents	Weighted Percentage
Yes	4	40
No	6	60
TOTAL	10	100

**TABLE 14 – QUESTION 19**

## FACTORS AFFECTING CONSUMPTION OF DRUGS IN THE HOSPITAL

FACTORS	Number of Respondents	Weighted Percentage
Price	2	20
Availability	5	50
Quality	2	20
Others (specify)	1	10
TOTAL	10	100

**TABLE 15 – QUESTION 20**

### FREQUENCY OF PATIENTS COMPLAINTS

FREQUENCY OF COMPLAINTS	Number of Respondents	Weighted Percentage
Very frequently	0	0
Frequently	4	40
Seldom	5	50
Never	1	10
TOTAL	10	100

TABLE 16 – QUESTION 21

### REASON FOR PATIENTS COMPLAINTS

REASON FOR COMPLAINTS	Number of Respondents	Weighted Percentage
Price	5	33.3
Quality	0	0
Strength of drug	0	0
Availability	9	60
Others (specify)	1	6.7
TOTAL	10	100

TABLE 17 – QUESTION 22

### TREND OF SALES IN THE PAST FIVE YEARS

TRENDS OF SALES	Number of Respondents	Weighted Percentage
Steady increase	2	18.2
Increase ??? lower rate	3	27.3
Constant	2	18.2
Decrease	4	36.3
TOTAL	11	100

TABLE 18 – QUESTION 23

**EXPLANATION ON THE TREND OF SALES**

EXPLANATION	Number of Respondents	Weighted Percentage
Patients dissatisfaction with drug quality	0	0
Price of drug too high	2	20
Inavailability of drugs	8	80
Others (specify)	0	0
TOTAL	10	100

Also the following are the tables of the patients responses to the various questions in the questionnaire.

TABLE 19 – QUESTION 7

**REASONS FOR BUYING OF DRUGS IN THE HOSPITAL PHARMACY SHOP**

REASON FOR BUYING DRUGS	Number of Respondents	Weighted Percentage
Price	2	16.7
Quality	9	75.0
Availability	1	8.3
Frequency	0	0
Others (specify)	12	100

TABLE 20 – QUESTION 8

**AVAILABILITY OF DRUGS**

AVAILABILITY OF DRUGS	Number of Respondents	Weighted Percentage
Yes	3	30
No	6	7

TOTAL	10	100
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TABLE 21 – QUESTION 9

**EFFECTS OF PRICE ON PURCHASING OF DRUGS**

EFFECTS	Number of Respondents	Weighted Percentage
Yes	7	70
No	3	30
TOTAL	10	100

TABLE 22 – QUESTION 10

**COMPARISON OF DRUGS PRICES IN THE HOSPITAL AND OUTSIDE**

COMPARISON OF DRUG PRICES	Number of Respondents	Weighted Percentage
Favourable	8	80
Unfavourable	2	20
The same	0	0
TOTAL	10	100

TABLE 23 – QUESTION 11

**PRICES OF DRUGS CHARGED BY THE HOSPITAL PHARMACY SHOP**

PRICES OF DRUGS	Number of Respondents	Weighted Percentage
Too high	3	30
Moderate	7	70
Low	0	0
Others (specify)	0	0
TOTAL	10	100

TABLE 24 – QUESTION 12 & 13

QUALITY OF DRUGS	Number of	Weighted
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	Respondents	Percentage
Superior	6	60
Moderate	1	10
Inferior	0	0
TOTAL	10	100

## 4.2 ANALYSIS OF THE FINDINGS

The results of the findings of the data collected can be discussed under the following headings:

- (a) The pricing objective of the Hospital Pharmacy Shop.
- (b) The importance of pricing to the Hospital Pharmacy Shop
- (c) Pricing Policy of the Hospital Pharmacy Shop
- (d) Price Changes
- (e) The Hospital Pharmacy Shop Pricing Strategy

### 4.2.1 The Pricing Objectives of the Hospital Pharmacy Shop

From the research findings, the main pricing objective of the Hospital Pharmacy Shop is: To meet patients needs, To make the drugs recently available and to make the drugs affordable to all patients. Other objectives are to provide the patients with quality drugs at all times. The Hospital Pharmacy Shop is not really concerned about profit maximization but is concerned only on setting prices that will enable the hospital to recover the cost of drugs, as such it is not a profit oriented organizations.

### 4.2.2 The Importance of Pricing to the Hospital Pharmacy Shop

The importance of pricing to the Hospital Pharmacy Shop is revealed through the composition of those involved in setting the prices. It was found out that those involved In reply to: setting of the prices are all from the Pharmacy Department. Pricing is very important in that it is seen to affect the patients consumption of drugs especially the out-

patients consumption of drugs especially the out-patients who are able to compare the prices of the drugs in the Hospital and outside the hospital. It was found out that where a price of a drug is high, its consumption is very slow. But in the case of the in-patient, price of drugs does not really affect the consumption. This is because the patient at this stage is more concerned about the effectiveness or quality of the drugs and how to get well quickly, than is concerned for the price of the drug. Formulation of the prices is usually done by the Pharmacists incharge of the Bulk Store who usually receives the drugs from the suppliers and is in a position to know the cost of the drugs received. This prices is then passed to the Pharmacy Shop in preparation for the selling of the drugs t the patients.

#### **4.2.3 The Hospital Pharmacy Shop pricing Strategy**

In developing the price, the Hospital usually blends several factors. These factors range from the Hospitals pricing policies and objectives to meeting the demand of a particular drug. Other factors are cost of the drugs at the point of received, government regulations and meeting the patients needs by making drugs available at all times and supplying quality drugs to the patients.

In setting the prices of drugs in the Hospital Pharmacy Shop, the mark-up pricing method is used. Usually, a mark-up of 20% (twenty percent) is used. However, drugs used in the treatment of cancer, tuberculosis, leprosy, and asthma a mark-up of 5% (five percent) is used.

This mark up pricing method is used so as to make the drugs affordable to all classes of patients. Also because the pharmacists have more certainty about the costs of the drugs and they do not have to make adjustments as demand changes. Also, with this pricing the pharmacist do not take advantage of the patient especially when the demand of the patient for a particular drug becomes acute.

#### **4.2.4 Pricing Policies of the Hospital Pharmacy Shop**

My investigation revealed that the Hospital Pharmacy Shop does not give any promotional allowances or discounts to its patients. However, patients on admission who are not able to pay for their drugs and other treatments, patients who are on cancer drugs, tuberculosis drugs and lepromatous drugs are usually given exemption. That is, the hospital is responsible for their treatment until they recovered. Also students receives treatment in the hospital on credit until their school authorities are able to settle the hospital.

#### **4.2.5 Price Changes**

My investigation revealed that price changes either increase or decrease does not really affect the consumption of the drugs in the hospital pharmacy shop. From the data collected in the pharmacy shop revealed that change in price does not affect the rate of consumption of the drugs much, but the availability of the drugs. As long as the drug is available it will be consumed, no matter how high the price of the drug is. Most of the patients that return the questionnaires are of the opinion that an increase in price of a drug is in line with economic situation of the country. Also another factor that can be considered to have affect on the consumption of drugs is the quality. From the questionnaire returned revealed that the patients are more concerned about the quality of the drug than of price. Once the patients are sure of the quality of the drug they are not usually concerned much about the price. Another factor that affect the consumption of drugs is long protocols. This really discourages so many patients as none of them lack the patience to go through such protocols. From the findings of the investigation, it would be deduced that the price of a drug has no great effect on the rate of consumption of the drugs in the Hospital Pharmacy Shop. However, if the economic crunch of the country persisted much longer, will affect the patients general purchasing power which will invariably have effect on the consumption of the pharmaceutical products.

## **4.2 PROOF OF HYPOTHESIS**

For the proofs of hypothesis, let us look back to the tables in the beginning of this chapter. Table 22 clearly upheld the null hypothesis (N11) which is the “price of drugs in Ahmadu Bello University Teaching Hospital Pharmacy Shop is favourable” is “Accepted”. The alternative hypothesis (AHO) which is the “price of drugs in A.B.U. Teaching Hospital is not favourable” is “Rejected”. A look at Table 14 shows that the null hypothesis which is “price has effect in the consumption of pharmaceutical products”. The alternative hypothesis which is “Price has no effect in the consumption of pharmaceutical products” is “Rejected”.

From Table 18 and 19 shows that the null hypothesis which is the “increase in sales volume of pharmaceutical products is as a result of good price”. The alternate hypothesis which is “the increase sales volume of pharmaceutical products is not as a result of good price” is “Rejected”.

From Table 18 shows that the null hypothesis which is the increase in sales volume of pharmaceutical products is as a result of availability of the pharmaceutical products” is “Accepted”. While the alternate hypothesis which is the “increase in sales volume of pharmaceutical products is not as a result of availability of the pharmaceutical product” is “Rejected”. Hence it can be said that the price of drugs in A.B.U. Teaching Hospital Pharmacy Shop, Zaria is favourable and that the increase in sales volume of the pharmaceutical products is a result of the availability of such pharmaceutical product in the hospital pharmacy shop.

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 SUMMARY AND CONCLUSION

Although various researches have proved that profit maximization is not always the main objective of organizations, and that price is not always the determining factor in purchase, the same researches equally agreed that for an organization to succeed it must be able to generate some revenue which is profit. Various researches also agree with the fact that it is only price which determines the sales volume of any organization. All others such as products, promotion and placements are costs. From the analysis of this research findings, it was discovered that the hospital pharmacy shop treat pricing as an essential tool because of the categories of patients that come to the hospital. Also, because in the case of out-patient price is seen to have some effects on the rate of consumption of the drugs in the hospital pharmacy shop.

However, in setting the price, the hospital pharmacy shop takes into consideration of the pricing objectives and policies of the hospital pharmacy shop, top management desires and expectations and government regulations. Also it takes into consideration the costs of the drugs at the point of received. Pricing is so vital to the hospital that only the pharmacy departments are involved in the price setting and pricing policies.

The mark-up pricing is used in setting prices. Hence, prices of drugs in the hospital pharmacy shop is considered to be favourable by the patients and some are of the opinion that an increase in price is in line with the economic situation in the country. They also agree that the price is commensurate with the quality of the drugs sold in the hospital pharmacy shop. The most appealing factor on the patients purchasing decision was found to be quality and availability of the drug. Most of the consumptions about price and pricing turn to be positive.

Price generally has been found to be of great importance because of its influence on resources allocation. Moreso, price is used as an indication of quality for those who lack other information about a product. This being so, many organizations have found it necessary to handle price and pricing policies with all the care it demand. The recent price hikes in the hospitals, pharmaceutical industry and in the economy generally is perhaps only responding to situational trends. Hence, it can be concluded that the prices of drugs in A.B.U. Teaching Hospital, Zaria are in line with the economic realities of the time. On the whole, prices of drugs has little effect on the consumption of the pharmaceutical products. However, the non-availability of the drugs has a far greater effect on the consumption of the pharmaceutical product than prices of drugs. The regular availability of drugs at the hospital pharmacy shop increases consumption thus increasing the credibility and acceptance of health workers, and this facilitate their important role in preventive medicine. Also another factor that has great effect on the consumption of the pharmaceutical products is the quality of the pharmaceutical product. Hence, it can be concluded that price has little effect on the consumption of pharmaceutical products in Ahmadu Bello University Teaching Hospital, Zaria.

## **5.2 RECOMMENDATIONS**

- (a) Some means or methods should be devised by the Hospital Pharmacy Shop to exert some amount of control over the prices of drugs charged to its patients. Sharp prices differences between the hospital pharmacy shop and those outside the hospital would no doubt have a negative impact on the consumption of drugs in the hospital pharmacy shop.
- (b) Prices of drugs should be low enough for the drugs to be affordable to all categories of patients and such drugs should be of high quality, thereby stopping the patient

from patronizing the outside pharmacy shops, thus reducing the problems of using substandard drugs.

- (c) Essential drugs should be made available at all times and should be stocked in large quantities. The hospital pharmacy shop should furnish the doctors with information of all drugs available in the pharmacy shop so as to avoid prescribing drugs that are not available in the pharmacy shop.
- (d) Drugs should be purchased directly from the companies as it tends to be cheaper and such purchases should be done in bulk hence there is the need for the hospital pharmacy shop to minimized the use of tender or purchases through the use of contractors.
- (e) Protocols that involve too much spending of money by the suppliers and long protocols involves in the supplying of drugs should be eliminated.
- (f) The Hospital Pharmacy Shop should carry out a market survey before fixing of any price of its drugs. This will keep the pharmacy shop on the alert on the current market price of drugs.
- (g) The hospital pharmacy shop should maintain a reasonable mark-up in costing for drugs just enough to make cost recovery possible.
- (h) The long protocols which patients undergo before getting their drugs should be eliminated.

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DEPARTMENT OF BUSINESS ADMINISTRATION  
A.B.U. ZARIA

Dear Respondent,

QUESTIONNAIRE

I am conducting an academic based research, which is a partial fulfillment for the award of the Masters Degree in Business Administration in Ahmadu Bello University, Zaria.

Please be kind enough to fill the attached questionnaire.

I assure you that it is purely for academic purposes and your responses will be treated in absolute confidence.

QUESTIONNAIRE FOR PHARMACIST/PHARMACY ASSISTANTS

Introduction

Please tick ( ) where applicable and tick more than one alternative where necessary. State appropriately where the question is open.

- 1) The status of Respondents:
  - a) Top Management ( )
  - b) Senior Officer ( )
  - c) Intermediate ( )
  - d) Junior Officer ( )
  
- 2) Sex of Respondent:
  - a) Male ( )
  - (b) Female( )
  
- 3) What is the main objective of the Hospital Pharmacy Shop?
  - a) Profit Maximization ( )
  - b) To meet patient's needs ( )
  - c) Others, Specify.....
  
- 4) What is/are the pricing objective of the Hospital Pharmacy Shop?
  - a) Profit Maximization ( )
  - b) To make drugs readily available at all times ( )
  - c) To make the drugs affordable to all patients ( )
  - d) Others, specify.....
  
- 5) What are your selling terms?
  - a) Cash and carry ( )
  - b) Credit sales for a period less than 30 days ( )
  - c) Credit to any credit-worthy patient ( )
  
- 6) Does the Hospital Pharmacy Shop sell on credit?
  - a) Yes ( )
  - (b) No ( )

- 7) Does the Hospital Pharmacy Shop purchase drugs on cash or credit or both?  
 Yes ( )                      Yes ( )                      Yes ( )  
 No ( )                         No ( )                         No ( )
- 8) How often is the purchase of drugs done?  
 a) Monthly ( )                      (b) Quarterly ( )  
 c) Annually ( )
- 9) How does the Hospital obtain the drugs being sold in the Pharmacy Shop?  
 a) Directly from the company ( )  
 b) Through medical sales representatives ( )  
 c) Others, specify .....
- 10) How would you describe the prices the Hospital pay for any of the drugs anytime they buy from the middle men?  
 a) Too High ( )                      (b) Moderate ( )  
 c) Others, specify.....
- 11) How would you describe the prices the Hospital pay for any of the drugs anytime they purchase from the company directly?  
 a) Too High ( )                      (b) Moderate ( )  
 c) Others, specify.....
- 12) Which department(s) is responsible for the fixing of prices for drugs?  
 a) Pharmacy Department ( )  
 b) Finance or Accounting Department ( )  
 c) Others, specify.....
- 13) When the prices of a drug changes in the Hospital Pharmacy Shop, does it affect the patient's consumption (sales) of the drug?  
 a) Yes ( )                      (b) No ( )
- 14) What are the patient's reactions to the change of price of any drug?  
 a) Inelastic ( )                      (b) Elastic ( )  
 c) Unitary demand ( )
- 15) How has the change of price of drugs affected the sales of the drugs?  
 a) Strongly ( )                      (b) Very Strongly ( )  
 c) Moderately ( )                      (d) No effect ( )
- 16) Has there been complaints in respect to price increase of drugs by the patients?  
 a) Yes ( )                      (b) No ( )
- 17) If Yes to question (16) above, state their complaints  
 .....
- 18) Are drugs readily available in the Hospital Pharmacy Shop?  
 a) Yes ( )                      (b) No ( )

- 19) What is the most important factor that affect the consumption of drugs in the Hospital?
- a) Price ( )                      (b) Availability ( )  
 c) Quality ( )                      (d) Others, specify.....
- 20) How often have patients complained about the drugs being sold in the Hospital Pharmacy Shop?
- a) Very frequently ( )                      (b) Frequently ( )  
 c) Seldom ( )                      (d) Never ( )
- 21) If question 20 is applicable (a-c), then with regards to what?
- a) Price ( )                      (b) Quality ( )  
 c) Strength of the drug ( )                      (d) Availability ( )
- 22) On the average, how would you describe the trend of sales in the past 54 years?
- a) Steady increase ( )  
 b) Increase but at a slower rate each successive year ( )  
 d) Constant ( )                      (b) Decrease ( )
- 23) If (b) or (d) to the above question, how would you explain the situation?
- a) Patients dissatisfaction with drug quality ( )  
 b) price of drug too high ( )  
 c) Inavailability of drugs ( )  
 d) Others, specify: .....
- 24) As a Pharmacist, what suggestions would you give to the Hospital Pharmacy Shops in respect of the price of drugs?

DEPARTMENT OF BUSINESS ADMINISTRATION  
A.B.U. ZARIA

Dear Respondent,

QUESTIONNAIRE

I am conducting an academic based research, which is a partial fulfillment for the award of the Masters Degree in Business Administration in Ahmadu Bello University, Zaria.

Please be kind enough to fill the attached questionnaire.

I assure you that it is purely for academic purposes and your responses will be treated in absolute confidence.

QUESTIONNAIRE FOR DOCTORS/NURSES/OTHERS

Introduction

Please tick ( ) where applicable and tick more than one alternative where necessary. State appropriately where the question is open.

- 1) The profession of the Respondent:
  - a) Medical Doctor ( )
  - b) Nursing ( )
  - c) Others, (specify).....
  
- 2) Sex of Respondents:
  - a) Male ( )
  - (b) Female ( )
  
- 3) Do you always purchase drugs for your patient in the Hospital Pharmacy Shop?
  - a) Yes ( )
  - (b) No ( )
  
- 4) If Yes, what makes you purchase drugs in the Hospital Pharmacy Shop?
  - a) Price ( )
  - (b) Availability ( )
  - c) Quality ( )
  - (d) Others, specify.....
  
- 5) Are drugs always available at the Hospital Pharmacy Shop?
  - a) Yes ( )
  - (b) No ( )
  
- 6) How would you compare the price of drugs in the Hospital Pharmacy Shop and outside the Hospital?
  - a) Favourable ( )
  - (b) Unfavourable ( )
  - c) The same ( )
  
- 7) Has there been complaints in respect to price increase by your patients?
  - a) Yes ( )
  - (b) No ( )

- 8) Has there been complaints in respect to drug availability by your patients?  
a) Yes ( ) (b) No ( )
- 9) How would you describe the price of drugs charged by the Hospital Pharmacy Shop?  
a) Too High ( ) (b) Moderate ( )  
c) Others, specify.....
- 10) Are the drugs within the reach of the patients?  
a) Yes ( ) (b) No ( )
- 11) How would you describe the quality of drugs being sold in the Hospital Pharmacy Shop?  
a) Superior ( ) (b) Inferior ( )  
c) Up to Standard ( ) (d) Moderate ( )
- 12) What suggestions have you for the Hospital Pharmacy Shops in respect of the price of drugs?

DEPARTMENT OF BUSINESS ADMINISTRATION  
A.B.U. ZARIA

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QUESTIONNAIRE FOR PATIENTS

Introduction

Please tick ( ) where applicable and tick more than one alternative where necessary. State appropriately where the question is open.

- 1) Sex:  
a) Male ( )                      (b) Female ( )
- 2) Age:  
a) 15 – 30 years ( )                      (b) 31 – 45 ( )  
c) Yes ( )                      (d) Above 60 ( )
- 3) Occupation:.....
- 4) Are you a regular patient in this Hospital?  
a) Yes ( )                      (b) No ( )
- 5) If yes, how long have you been attending this Hospital?  
a) 6 months – 1 year ( )                      (b) 1 – 2 years ( )  
c) 2 –3 years ( )                      (d) Above 3 years ( )
- 6) Do you always buy your drugs in the Hospital Pharmacy Shop?  
a) Yes ( )                      (b) No ( )
- 7) If Yes, what makes you buy your drugs in the Hospital Pharmacy Shops?  
a) Price ( )                      (b) Quality ( )  
c) Availability ( )                      (d) Proximity ( )  
e) Others, specify.....
- 8) Do you always get the drug prescribed for you in the Hospital Pharmacy Shop?  
a) Yes ( )                      (b) No ( )

- 9) Does the price of the drugs affects your buying the drugs in the Hospital Pharmacy Shop?  
 a) Yes ( ) (b) No ( )
- 10) How would you compare the price of drugs in the Hospital Shops to those outside the Hospital?  
 a) Favourable ( ) (b) Unfavourable ( )  
 c) The same ( )
- 11) How would you describe the price of drugs charged by the Hospital Pharmacy Shop?  
 a) Too High ( ) (b) Moderate ( )  
 c) Others, specify.....
- 12) How would you describe the quality of the drugs sold in the Hospital?  
 a) Superior ( ) (b) Moderate ( )  
 c) Inferior ( ) (d) Up to Standard( )
- 13) How would you compare the quality of the drugs being sold in the Hospital Pharmacy Shop?  
 a) Superior ( ) (b) Inferior ( )  
 c) Up to Standard ( )
- 14) What suggestion(s) would you give the Hospital Pharmacy Shops in respect of the price of drugs?

- 13) When the price of a drug changes in the Hospital Pharmacy Shop, does it affect the patient's consumption (sales) of the drug?  
 a) Yes ( ) (b) No ( )
- 14) What are the patient's reactions to the change of price of any drugs?  
 a) Inelastic ( ) (b) Elastic ( )  
 c) Unitary demand ( )
- 15) How has the change of price of drugs affected the sales of the drugs?  
 a) Strongly ( ) (b) Very Strongly ( )  
 c) Moderately ( ) (d) No effect ( )
- 16) Has there been complaints in respect to price increase of drugs by the patients?  
 a) Yes ( ) (b) No ( )
- 17) If Yes to question (16) above, state their complaint?  
 .....
- 18) Are drugs readily available in the Hospital Pharmacy Shop?  
 a) Yes ( ) (b) No ( )
- 19) what is the most important factor that affect the consumption of drugs in the Hospital?  
 a) Price ( ) (b) Availability ( )  
 c) Quality ( ) (d) Others, specify.....
- 20) How often have patients complained about the drugs being sold in the Hospital Pharmacy Shop?  
 a) Very frequently ( ) (b) Frequently ( )  
 c) Seldom ( ) (d) Others, specify.....
- 21) If question 20 is applicable (a-c), then with regards to what?  
 a) Price ( ) (b) Quality ( )  
 c) Strength of the drug ( ) (d) Availability ( )  
 e) Others, specify.....
- 22) On the average, how would you describe the trend of sales in the past 5 years?  
 a) Steady increase ( )  
 b) Increase but at a slower rate each successive year ( )  
 d) Constant ( ) (b) Decrease ( )

DEPARTMENT OF BUSINESS ADMINISTRATION  
A.B.U. ZARIA

Dear Respondent,

QUESTIONNAIRE

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QUESTIONNAIRE FOR PATIENTS

Introduction

Please tick ( ) where applicable and tick more than one alternative where necessary. State appropriately where the question is open.

- 1) The status of Respondents:
  - a) Top Management ( )
  - b) Senior Officer ( )
  - c) Intermediate ( )
  - d) Junior Officer ( )
  
- 2) Sex of Respondent:
  - a) Male ( )
  - (b) Female( )
  
- 3) What is the main objective of the Hospital Pharmacy Shop?
  - a) Profit Maximization ( )
  - b) To meet patient's needs ( )
  - c) Others, Specify.....
  
- 4) What is/are the pricing objective of the Hospital Pharmacy Shop?
  - a) Profit Maximization ( )
  - b) To make drugs readily available at all times ( )
  - c) To make the drugs affordable to all patients ( )
  - e) Others, specify.....