Analyzing marketing mix elements influencing customers' brand preference of medicines in Addis Ababa

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Approved by board of examiners

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Statement of Declaration

I hereby declare that this study entitled "Analyzing marketing mix elements influencing customers' brand preference of medicines in Addis Ababa" is my original work prepared under the guidance of my advisor, Mulugeta G/Medhin (PhD). This paper is submitted in partial fulfillment of the requirement for the Award of Master of Arts Degree in Marketing Management and it has not been previously submitted to any diploma or degree in any college or university. I would like also to confirm that all the sources of materials used in this study are duly acknowledged.

Name: - *Simon Yirga*

Sig.: _____

Date: _____

Statement of Certification

This is to certify that Simon Yirga has carried out his research work entitled "Analyzing marketing mix elements influencing customers' brand preference of medicines in Addis Ababa" in partial fulfillment of the requirement for the Award of Master of Arts Degree in Marketing Management at Addis Ababa University College of Business and Economics School of Commerce. This paper is an original work and has not been submitted to any diploma or degree in any college or university.

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Mulugeta G/Medhin (PhD)

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Abstract

This research paper investigates the effect of marketing mix elements on customers brand preference with special reference Ethiopian pharmaceutical industry. The survey research design method was used in this study which involves using a self-design questionnaire in collecting data from 321 respondents across 8 Kenema Pharmacy Branches in Addis Ababa. The instrument used in this study is a close-ended questionnaire that was adopted from pervious researchers. Correlation coefficient and multiple regression analysis were used to analyze the data with the aid of statistical package for social sciences (SPSS) version 22. The result showed that marketing mix elements have significant effect on brand preference by customers. Subsequently, recommendations were made to the management of the pharmaceutical companies that they should continue to promote widely, charge competitive prices and product superior quality. .

Keywords: Brand preference, Perceived quality, promotion, price, availability

CHAPTER ONE

1. INTRODUCTION

1.1.Background of the study

A medicine is a tangible product and as such, it may be x-rayed in to 'core', 'real' and augmented constituents (Blackett, 2001). The core product reflects the medicines' efficacy, use, side effects and contraindications. Likewise, the medicine's brand name reflects the real products whereas the augmented constituent comprises a vast array of add-value services.

Similar to other industries, the main objective of pharmaceutical marketing is to increase the profit ability of the organization by accommodating the needs and wants of consumers. In different commercial industries other than pharmaceutical it is much easier for the customer to make the choice to which brand and item ought to be obtained consistent with their necessities and prerequisites. (Blackett, 2001).

The marketing strategies employed in the pharmaceutical industry sharply contrast with those typically adopted in other markets. One of the primary reasons for this difference is that in the prescription medicine market there is a distinct breach in the traditional buying decision process. The decision maker is the physician, who chooses among an array of medicine alternatives, but the buyer is the patient who takes the medicine and ends up paying (i.e. either out of pocket, or thought health insurance coverage) for the choices made by the physician. In this vein, the marketing of prescriptive medicines calls for variation from the traditional marketing practices

studied so far. The marketing literature is replete with examples in which the chooser is not the user. Organizational buying, toy purchasing, and tax book buying provide examples of situations in which in which the decision maker is necessarily difference from the user (Blackett, 2001). However, the major deviations from the aforementioned examples are that prescriptive medicine market is highly regulated (i.e. top prices and shopping outlets are approved by the government) and traditional advertisement is not legally permitted. (Cavdill et al., 1996).

Further, pharmaceutical market is typical in the sense that the doctors are the one who decides therapy and drugs for the consumers (patients). So, marketers promote their products directly to doctors to influence favorable prescription generation by them. Prescription behavior of doctors further increases peculiarity as doctors' choice is more logical for choosing a therapy & drug molecule but when it comes to selecting a particular brand their decision may be more inclined towards emotional and less rational (Cavdill et al., 1996).

1.2.Statement of the problem

Direct to consumer advertising (DCTA) of prescription medicines has been legal in the United States (US) since the mid 1980s and in New Zealand (NZ) since the mid 1990s. While DTCA is not legal in Australia, Disease State Awareness (DSA) and un-named product advertisements to consumers are legal and are self-regulated by the pharmaceutical industry. There is active debate over the impact of DCTA within NZ and the US, and in other countries considering its potential adoption. Some of the argued benefits include the provision of health information to consumers, involving consumers in health decision-making and potentially improving patient compliance (hock, Gendall, and Calfee, 2004). Some of the concerns over DTCA include the focus on profit to the pharmaceutical industry as opposed to public health; the potential for disease mongering;

the creation of a “pill for every ill” mentality; and negative impact doctor\patient interactions (Coney, 2002; Mintzes et al., 2002). With the trans-Tasman regulatory scheme for therapeutic products proposed for introduction in 2006 there has been considerable discussions and lobbying within Australia and NZ with regard to the future of DTCA, and the NZ government has recently launched a review of the regulation of DTCA (Ministry of health 2006), which may have implications for both countries.

Access to medicines of assured quality remains a major concern worldwide. About 30% of the world’s population lacks regular accesses to essential medicines, in the poorest parts of Africa and Asia this figure rises to over 50%(Cameron et al..,2009).The most crucial element which restricts accesses to medicines is drug pricing and affordability is thus addressed by using generic medicines as a cost containment strategy (WHO,2008).

The main sources of drug expenditure in Ethiopia is drugs from private drug retail outlets(FMOH\WHO,2007).according to survey on price of medicines in Ethiopia, innovator brand products in the private pharmacies was generally 6 times as expensive as generic equivalents (FMOH\WHO,2005).Thirty nine percent of the clients in the private sectors of Addis Ababa were not able to pay for the prescribed medicines and the most important predictors of community’s ability to pay for the prescribed medicines is the price of the prescribed medicines (Mohammed et al.,2009).

Marketing of pharmaceuticals is of crucial importance from an economic as well as a social well as a social welfare perspective. Academic research in this domain is growing, yielding interesting observations on the outcomes of pharmaceutical companies’ marketing action (Dale and Patricia 1981). Large scale surveys among physicians have been used to describe

prescription outcomes. In addition, the impact of marketing instruments like advertising, detailing and pricing has repeatedly been examined on the bases of factual data, collected by specialized syndicated sources such as IMS (Dale and Patricia 1981; Dick, 2002)

Taking into account the above conditions, how customers make decisions in purchasing the brand of the drug, and how much marketing factors of the pharmaceutical industry influence customers brand preference of medicines has not been empirically tested in Addis Ababa. Therefore, this study will bridge the gap through establishing a link between the various marketing factors and customers brand preference in Addis Ababa.

1.3.Research question

1.3.1. Main research question

- How do marketing mix elements influence customers' brand preference of medicines in Addis Ababa?

1.3.2. Sub-Research question

1. To what extent promotion of specific brand of a medicine influence customers' brand preference in Addis Ababa?
2. How does perceived quality of a medicine influence customers' brand preference in Addis Ababa?
3. How does the price of a medicine influence customers' brand preference in Addis Ababa?
4. To what extent availability of a medicine influence customers' brand preference in Addis Ababa?

1.4.Objective

1.4.1. General objective

- To examine marketing mix elements influencing customers' brand preference in Addis Ababa

1.4.2. Specific objective

- To determine the effect of promotion on customers' brand preference in Addis Ababa.
- To investigate the effect of perceived quality on customers' brand preference in Addis Ababa.
- To examine the effect of price on customers' brand preference in Addis Ababa.
- To determine the effect of availability on customers' brand preference in Addis Ababa.

1.5.Hypothesis

H1: Perceived quality has a significant effect on brand preference.

H2: Promotion has a significant impact on brand preferences.

H3: Availability has a significant impact on brand preferences

H4: Price has a significant impact on brand preferences.

1.6.Significance of the study

The findings of the study will have important implications for the marketers in order to do proper allocation of their resources, to improve their promotional efficiency. If various factors related to marketing activities affecting customers' brand preference can be identified and weighted, then this insight could contribute greatly in resolving the controversy on how marketing efforts of pharmaceutical firms affect prescription behavior. Further, such insights could help marketers in maneuvering relevant factors for favorable prescription generation.

1.7.Scope of the study

Methodologically, the study followed a quantitative approach that collects primary data using survey and the geographically the study is delimited to Addis Ababa.

1.8.Organization of the study

The study is organized in five chapters. The first chapter discusses the introduction, background of the study, statement of the problem, research question, objective, hypothesis and significance of the study. The second chapter consists of theoretical frame work, empirical analysis and conceptual frame work of the study. The third chapter explains the methodology part. And the fourth chapter analyzes the data collected through questioners and presents the findings. The final chapter consists of the summary of findings, conclusion and recommendation.

CHAPTER TWO

2. Literature review

2.1.Introduction

Existing related literature suggest conflicting views on effectiveness of promotional efforts in terms of influencing doctors' brand preference. Studies suggested that firms' marketing efforts may have a positive effect on prescription behavior, as detailing visits and symposium meetings provide valuable information to the doctor on efficacy and side effects of the particular drug. Further elaborating on the same issue, suggested that pharmaceutical companies marketing efforts may actually have both an informative role (e.g. reducing cognitive uncertainty) and a persuasive role (e.g. inducing positive affect towards a drug). On the other hand, marketing efforts by pharmaceutical companies to the doctor positively affect new prescriptions issued by a doctor (Kotler, 2000; Blackets, 2001; Gonul, et al., 2001)

The influence of promotional tools by pharmaceutical industry on prescribing behaviors of doctors has a greater impact. The general promotional tools like gifts, free medical samples, vacations and etc. These are more influential rather than scientific promotional tools for the physicians contrast with consultants. Manchanda, et al., (2004) and Mitik, et al., (2003) analyzed the effect of drug sample availability on physician brand preference. Based on their review, they investigate that most accepted view that the medicines free samples are beneficial to the patients and indirectly the good caring response come from the doctors from the free samples that's why it should be reconsidered.

Examining the Brand preference behavior among Medicare beneficiaries with capped Brand preference benefits. It was found that the Brand preference behavior has significant impact on the Medicare choices members. The ethical activities from the medicine companies to the medical professionals through communications by medical sales representatives (Jeremy, 2004). Small gifts such as pens, notepads, pens, dinners sponsored by pharmaceutical companies, sponsorship to the conferences and many other activities under taken by physicians. Many doctors do not take into account accept small gifts as unethical and inputs such Rx affect its structure. A doctor agrees that such activities by the pharmaceutical companies are the indirect requirement of their drug Brand preferences (Stephen and James, 2004; PHRMA, 2004).

The personalized pharmaceutical marketing along with the facility of gifts and sponsorship to education recreational activities. The donations and sponsorships offered by the pharmaceuticals and reviews of doctors on it, that it is ethical or unethical was examined. Physicians are more towards the concern of ethical values and issues contrary to residents. Physicians more eager and concern on the gifts and different things provided from the pharmaceutical organizations for donations and sponsorships at the start of their careers (FAMILIES USA FOUND, 2001; Dick, 2002; Dale and Patricia, 1981).

The factors influencing Brand preference behavior of physicians are Price of the product, Availability of the product, Communication made by MR the product quality that is being promoted. Name of the company for which brand belongs to which company, new research molecule and new research combination drug. Free of cost samples of the drugs, free medical camps, product folders, Continuous Medical Education (CME's), Gifts & other promotional inputs, Research Molecule, Incentives, Sponsorships to conferences. The conclusion shows that

marketing strategies influence the physician Brand preference behavior in this study (Dick, 2002).

The mindset and the factors, which influences the brand preference of physicians and their practice in Greece and Cyprus, and may be used for creating policies and enhance their choices. The highlight of the study was that drug clinical effectiveness is necessary element in prescribing medicine. Another research was conducted in Denmark, found that price is also an important factor in prescribing drug and on top of that Pharmaceutical industry, sales representative affects physician's behavior (Dick, 2002; The Economist, 2003).

Pharmaceutical organizations often use drug samples as a technique in the ambulatory proper care establishing. Little is known about how the accessibility to drug samples affects physicians' prescribing methods. Another researches looks at self reported doctor actions, avoiding cost to the individual was the most reliable motivator for physicians to use drug samples, although physicians recognized other advantages of drug samples that varied with the medical conditions. The recognized advantages of drug samples often led physicians to review that they would distribute or recommend medicine that differed from their preferred medication choice (Cavdill et al., 1996).

The financial rewards that had been suggested described or used regardless of their preliminary purpose and, when possible, to evaluate the outcomes of these rewards on expenses, procedure or outcomes of care Systematic review of the fictional works (Samule, 1993; John et al., 1997). The effect of drug samples for the prescribing habits of family practice citizens and staff for the therapy of hypertension. That highlights the need for a multi-facility research to figure out the

impact of drug samples on prescribing practices (John et al., 1997; Syed and Robert, 1996; Thomson et al., 1994).

Whether and how costs and marketing activities influence Brand preference choice behavior using an extensive board of doctors and data on competitive cost and marketing activities. The studies find that physicians are recognized by fairly limited cost understanding outlining and examples have a mostly useful effect on physicians and physicians with a relatively large amount of Medical health insurance or health maintenance organization patients are less affected by promotion than other physicians (David et al., 1996; Mathaven et al., 1997; Poul et al., 1990).

2.1.1. Product

A product is what the company has to offer, whether it is something tangible, like a mobile phone, or a service, like health treatment. It is anything that can be offered to satisfy a market's want or need. Successful companies consider the product's form, functionality, features, and benefits from the consumers' point of view. Moreover, each and every product must meet the needs of a particular target market (consumers' expectation). For example, a luxury product should create just the right image for "customers which have everything" (Goi, 2009). Many researchers suggest that the basic product must be positioned for better quality and price-conscious consumers.

Other important aspects of product may include: an appropriate product range, design, warranties, or a brand name. Everyone buys products for their own personal benefit, and they buy a product with some expectations. For example, consumers buy books with the expectation of enjoyment and knowledge. There are four types of products. These are as follows.

1. *Formal product*: This product refers to the physical item which is bought by the consumers for their own benefit; for example, mobile, computer, and etc.

2. *Core product*: The core benefit is associated with using the formal product; what the customer is actually buying from the companies; for example, knowledge or status.

3. *Augmented product*: The totality of benefits that the customer receives from the formal product; for example, time saved or quick access to information.

4. *System product*: This product refers to the expansion of the augmented product

the attendant add-on and extras that come with the formal product; for example, manuals, training support (Kotler *et al.*, 2009).

2.1.2. Price

Pricing is one of the important decisions that need to be made by a firm which would affect its revenue and profitability. In determining the price of a product, a company or marketing manager needs to consider not only the costs it takes to produce the item, but also the customer's perception on the value of the product (Hanna and Dodge, 1995). Moreover, companies strive to get the maximum margin by looking at a whole range of possibilities to set the right price to certain types of customer.

In economics, Adam Smith gives the notion of price as "value in exchange". Moreover, price is determined by the intersection of supply and demand in the market, or the so called market mechanism (Stiglitz & Walsh, 2006). While from a marketing perspective, price is defined as

"The amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or service" (Kotler and Armstrong, 2004).

With respect to the types of market, companies face different conditions in order to set the price for its products. In a perfect competition market, companies become only a price taker, which means that it could not (freely) set its own price(s). Instead it has to follow the market price. Given many sellers and no information asymmetry, a perfect competition market would mean that there would be no room for each seller to earn abnormal amounts of profit, and instead it entitles each company to get a normal or equal profit only. Whether they like it or not, companies have to set their price equal to market price.

If it is more than market price, the consumers would not buy from them and find other sellers instead. Meanwhile, if it is less than market price, the company would receive many demands and would not be able to meet this expectation as their stocks would be limited. The other feature of perfect competition market is that there would be no product differentiation, as all sellers would supply the generic or perfect substitutions of, goods.

According to Kotler and Armstrong (2004), price is one important element of marketing mix. In determining price, firms should consider other marketing mix elements, due to any decision made pertaining to those elements would affect the price too. Thus, firms have to think comprehensively with regards to the marketing mix strategy, especially when considering the price. In the product development stage, instead of analyzing the product features first, firms can set the ideal selling price first for particular customers, and then develop the product to suit that price. This technique is called 'target costing' (Kotler and Armstrong, 2004).

In 1996, Balasubramaniam reported that retail medicine prices in developing countries in the Asia Pacific Region, and in selected developed countries, varied dramatically, with percentage differences varying from several hundreds to several thousands, with extremely large ranges for the developing countries (minimal difference 233%; maximum 32,757%) (Balasubramaniam, 1996).

Comparison of the medicine prices with economic indicators (minimum daily wage and real per capita gross domestic product (GDP)) and common food items (rice, sugar, milk and eggs), showed that it was rarely possible to pay for a treatment course by leaving out a meal, as again, the ranges for medicine prices were staggering in comparison with the economic or household references (range for price of 1 kg rice US$ 0.39–0.80; range for price of 100 Zantac tablets US$ 3–250) (Note: Zantac is ranitidine as marketed by GlaxoSmithKline, 150 mg). This collection of papers and further work by the same and other authors highlighted the issue of medicine pricing in the context of equitable health care (Balasubramaniam, 2001).

In 2000, Myhr published a study comparing the prices and availability of a selected number of essential medicines in different sectors of the health care system in four East African countries, Ethiopia, Kenya, Uganda and the United Republic of Tanzania (Myhr, 2000). A basket of 15 different essential medicines was developed on the basis of essential needs for medicines for prevailing diseases (tropical diseases, HIV/AIDS and opportunistic infectious diseases), as well as patent status. Prices were collected from different sectors in rural and urban areas in each country. Information on official duties, taxes and mark-ups was also collected. The data collection was done in a few randomly selected facilities in May 2000. International reference price (IRP) data were taken from the Norwegian official price list, as being representative of typical European prices.

The results of this survey showed that both Ethiopia and the United Republic of Tanzania had low- or non-availability of many of the observed medicines, whereas Kenya had high availability. The lowest availability was generally found in the public sector. In the private not-for-profit sector, the availability was almost the same as in the private sector. Private hospitals in Ethiopia and the United Republic of Tanzania were poorly stocked with the indicator medicines. Looking at the range and the difference between originator medicines and generics, generics were generally found to be significantly cheaper than the originator medicines. It was also observed that the more generics were available, the larger the spread in prices between the cheapest generic and the originator brand.

The data confirmed earlier findings that pharmaceutical pricing is, according to the authors, about the" law of the jungle, where might is right and medicines are very far from being equity priced". The wide variation in prices of originator medicines in developing countries suggested that the guiding principle that the pharmaceutical industry seems to apply when fixing prices is to set the upper limits according to what the market can bear. The results further confirmed that high retail prices of originator medicines in developing countries were often double those in European countries.

The impact of generic competition on prices of generics was that these products were often priced at less than one tenth of the price of the originator's brand. There were large differences in medicine prices between the four countries surveyed. Following the study in East Africa, a methodology was developed by HAI and WHO for the systematic collection of medicine prices, availability and affordability data, resulting in a first draft manual that was published in 2003 (WHO and Health Action International, 2003)

Recently surveys of prices, availability and affordability of medicines for chronic disease have been completed by WHO in five countries; Bangladesh, Malawi, Nepal, Pakistan and Sri Lanka. These surveys are based on a longer list of chronic disease medicines than in previous surveys. The report in its present form provides only aggregate basket data and not comparative results on specific individual medicines. However the general results, as yet unpublished, are consistent with the specific findings reported in this paper (S. Mendis et al., 2008)

2.1.3. Place (Availability)

A place or distribution channel is a way of transporting the product to the customer and the level of accessibility of the product to customers. This element of marketing mix is like the vehicle for the other elements of marketing (product, price, and promotion). Without place, the customer will not have access to products.

Distribution channels can be defined as "*a path through which goods and services flow in one direction (from vendor to the consumer) and the payments generated by them that flow in the opposite direction (from consumer to the vendor)*".

There are some basic channel decisions that a marketer must make before venturing to make the products accessible to the customers. These decisions are direct or indirect, single or multiple, cumulative length of the multiple channels, types of intermediary and the number of intermediaries at each level. A channel is said to be direct when the distribution is from the company to the customer and the payment is paid directly to the company. When a channel is indirect, the company sends the products to a distribution centre and the distribution centre distributes to their major distributors and each distributor will send the products to retailers which will be made accessible to the local or global customers depending on how big the

company is. The two types of distribution channels discussed above are for physical and tangible products. For services, a service channel will ensure the accessibility of the services to customers.

2.1.4. Promotion

According to the definition of the Chartered Institute of Marketing (2004), 'promotional mix' is "a term used to describe the set of tools that a business can use to communicate effectively the benefits of its products or services to its customers". Thus, promotional mix is said to include tools such as advertising, public relations, sales promotion, direct marketing, and personal selling. Businesses need to inform customers of the products and services they provide in order to facilitate the firm's survival in the very competitive business environment. In addition, "effective communication with your customers is vital to ensure that your business generates sales and profits" (Abdullah & Ahmad, 2010)..

This latter part of the explanation given by the Chartered Institute of Marketing (CIM) is where promotion in Islamic marketing would beg to differ, since generating sales and profits is not the main objective or goal of businesses implementing Islamic marketing. Promotional mix activities can be beneficial in terms of social and economic progression by encouraging "healthy competition", however from the lens of an Islamic marketer; these activities should not encourage wasting or overspending of resources (Abdullah & Ahmad, 2010).

2.1.5. The concept of brand preference

The notion of preference has been considered in different disciplines such as economists, psychologists, sociology. However there is no commonly agreed definition of preference among

these disciplines. For example, economists believe that preferences are exogenous stable, and known with adequate precession and are revealed through choice behavior. The economic view of preference had been criticized for assuming that preferences are stable and endogenous. An individual's preferences are not stable and can be endogenous or exogenous. Generally, the term brand preference refers to the degree of brand loyalty in which a customer definitely prefers one brand over competitive offerings and will purchase this brand if it is available. However, if the brand is not available, the customer will accept a substitute brand rather than expending additional effort finding and purchasing the preferred brand (Dibb et al., 2006).

In marketing literature, the word preference means the desirability of choice of an alternative. Preferences are above all behavioral tendencies (Zajonc and Markus, 1982). Brand preference is defined variously as the consumer's predispositions toward a brand that varies depending on the salient beliefs that are activated at a given time; the consumer biasness toward a certain brand; the extent to which a consumer favors one brand over another. Moreover, there is difference between brand preference and brand loyalty. Brand preference represents the attitudinal brand loyalty excluding the action of repeat purchasing; the brand-oriented attitudinal loyalty. The main theme is that the first three decision making phases of brand loyalty constitute the focal of brand preference. Thus, brand preference is related to brand loyalty; however, brand loyalty is more consistent depicted by the long term repeated purchasing behavior (Ebrahim, 2011).

2.2.Empirical Review

2.2.1. Perceived product quality

Perceived quality is another important dimension of brand equity. Perceived quality is not the actual quality of the product but the consumer's subjective evaluation of the product (Zeithaml,

1988). It is a competitive necessity and many companies today have turned customer-driven quality into a potent strategic weapon. They create customer satisfaction and value by consistently and profitably meeting customer's needs and preferences for quality. Kotler (2000) draws attention to the intimate connection among product and service quality, customer satisfaction, and company profitability.

In the context of quality of medicine, it is little more than doctor perceptions as to "how well a particular drug from a particular pharmaceutical firm will perform for a particular patients conditions." Quality of medicine comes first which is aimed at building brand image and increasing market share because its primary service is the patient's recovery or the exchange of trust. Domestic and multinational companies are competing with each other for their establishment and doctors have different perceptions of each pharmaceutical product regarding quality (Jeremy, et al., 2011)

Studies have revealed that registration of brand names is a persistent problem and drug names are often difficult to spell, pronounce and remember (Castillo and Hopkins, 2003). Licensing of drugs, for prescribing, needs to demonstrate quality, safety and efficacy (Jureidini and Mansfield, 2001). Corporate image has a significant but indirect impact on customer loyalty and loyalty is driven both by disconfirmation of expectations and the corporate image (Ehrengberg and Barnard, 2000). Richarme (2001) argues that consumers form a subset of brands to which they apply decision making strategies.

H1: Perceived quality has a significant effect on brand preference.

2.2.2. Promotion

Drug promotion includes all information and persuasive activities carried out by manufacturers with the aim of increasing usage of product (Chew et al., 2000). Pharmaceutical companies influence the doctors through published clinical materials on international and multi-centered studies. These companies do not just promote drugs and they also promote illness, which is considered as a subtle way of promotion (Jueridini and Mansfield, 2001). Medicthough pharmaceuticals industry are gifts are more influential they are considered as less appropriate (Gibbon et al., 1998).

H2: Promotion has a significant impact on brand preferences.

2.2.3. Price

Freemantle and Eastaugh (2002) argue that cost effectiveness as an important factor that influences doctors' prescribing behavior. Financial pressures have led to use cost effectiveness for making decision about drugs (West, 2002). Richarme (2001) argues that the degree of involvement in purchase decision making is not necessarily a function of the price and is more related to the perceived quality, product attributes and benefits are also found to be important factors (Phillips, 1984).

H3: Price has a significant impact on brand preferences.

2.2.4. Availability

Availability and out of stock have been found as important place elements that influence doctors' prescription behavior (Ehrengberg and Barnard, 2000). Castillo and Hopkings, (2002) contend

that consumers have a tendency to find out what they need to know about prescribed medications from pharmacists. Firm size, frequency of customer contact and use of direct channels of distribution have shown impact on businesses (Hanssens et al, 2004). Ehrengberg and Barnard, (2000) observed that discounts given by pharmacist have caused increased sales of drugs.

H4: Availability has a significant impact on brand preferences.

2.3.Conceptual frame work

Pharmaceutical product user's characteristics and choice determinants can be explained by consumers' stimulus – responses model of user behavior. Thus, the stimulus response model that show the interaction of marketing factor and decision process of product user to words the final brad choice or preferences will be considered as a framework for this study. In making a preference decision, consumers respond to the stimuli developed by the selling company. The greater the company's knowledge is about the reactions these stimuli elicit, the greater the competitive advantage for that company (McDonald & Christopher, 2003).

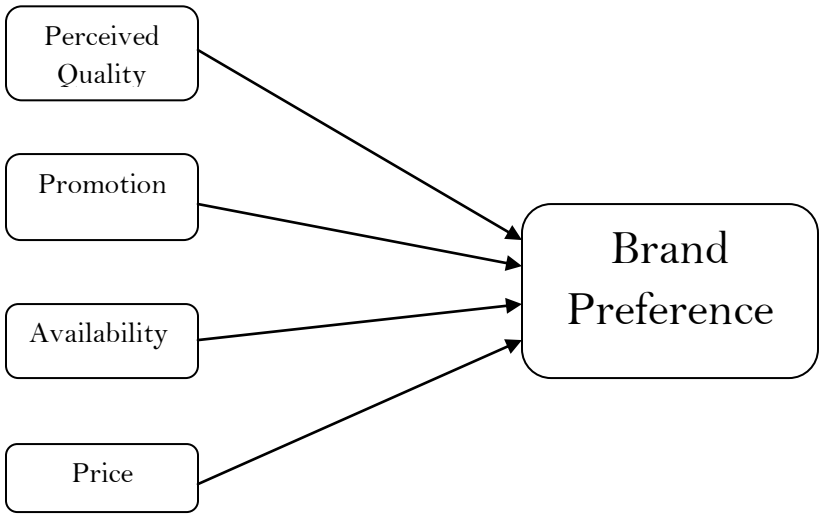

Figure 1 Marketing Mix Model

Chapter Three

3. Methodology

This chapter discusses the research methodology used for conducting this research. The research approach, research method, population and sample of the study, the type of data to collect and instrument to use, methods of data analysis are specified. Finally, ethical issues related to the study are explained and justified.

3.1.Research Approach

Research can be classified in to two based on its approach. These are qualitative research and quantitative research. Qualitative research involves studies that do not attempt to quantify their results through statistical summary or analysis. It seeks to describe various aspects about behavior and other factors in the social sciences and humanities. In this kinds of research data are often in the form of descriptions, not numbers. It typically involves in-depth interviews, group discussions, and observations without formal measurement.

Quantitative research is the systematic and scientific investigation of quantitative properties and phenomena and relationships. The objective of quantitative research is to develop and employ mathematical models, theories and hypotheses pertaining to natural phenomena. It usually starts a general statement proposing a general relationship between variables. Quantitative researchers favor methods such as surveys and experiments, and will attempt to test hypotheses or statements with a view to infer from the particular to the general.

Therefore the researcher chose quantitative research to identify the effect of marketing mix elements on customers brand preference of medicines.

3.2.Research Method

From the viewpoint of objectives, a research method can be divided into four. These are descriptive, correlation, explanatory and exploratory. Descriptive research attempts to describe systematically a situation, problem, phenomenon, service or program me, or provides information about , say, living condition of a community, or describes attitudes towards an issue. Correlational research attempts to discover or establish the existence of a relationship/ interdependence between two or more aspects of a situation. Explanatory research attempts to clarify why and how there is a relationship between two or more aspects of a situation or phenomenon. Exploratory research is undertaken to explore an area where little is known. In practice most studies are a combination of the first three categories investigates the possibilities of undertaking a particular research study.

3.3.Population and Sampling Techniques

The target populations for the study were consumers of the medicines which are found on kenema pharmacy branches. The target population of the study can be considered as infinite population.

Thus, the following sampling formula for infinite population was used to come up with the sample size (Isreal 2013).

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where, n_0 -Sample size

Z – z value at specified confidence interval

p - Estimated proportion of an attribute present in the population

e – Desired level of precision

With 95% confidence interval, 5% level of precision, and a proportion of 50%, the sample size for this study is determined to be 384. The 50% proportion is the maximum variability in a population, which is often used in determining a more conservative sample size (Isreal 2013). Therefore, sample size of the study becomes 384. The customers of the selected drug stores and pharmacies will be intercepted randomly until the sample size is reached.

3.4.Data Collection Instruments

The study depends on the primary data collected through self-administered questionnaires survey. Questionnaires are applied usually for descriptive, which identify and describe the variability in different phenomena or explanatory research, which examine and explain relationships between variables (Saunders, Lewis&Thornhill, 2009).

Questionnaire with the five point Likert's scale format and closed-ended items format are prepared to gather data from the respondent's (Rashid, et al, 2002). According to Spector (2004), the Likert Scale is a popular device for measuring people's perceptions, attitudes, beliefs, emotions and personality traits.

The questionnaires prepared in line with the objectives of the study are organized in three sections. The first section was designed to obtain the demographic information of the respondents. The second section inquired how respondents perceive the marketing mix on the four dimensions of "product quality", "promotion", "product availability" and "price". Questions related to customers' brand preference using items "inquire about", "consider preferring" and "actually prefer" are included in the third section of the questionnaire.

3.5.Validity & Reliability

Validity and reliability are the two main issues that one should consider in developing data collection instruments.

i. Validity

Validity: - is defined as the extent to which a measurement represents characteristics that exist in the phenomenon under investigation (Malhotra& Birks 2007). The scales that are used for this study are valid scales adopted from different previous researches.

ii. Reliability

Reliability: - is the extent to which a measurement reproduces consistent results if the process of measurement were to be repeated (Malhotra& Birks 2007). In order to check the internal consistency of the instrument, a pilot study was conducted on 30 respondents and reliability test was done using Cronbach-Alpha.. Cronbach-alpha is widely used in educational research when instrument for gathering data have items that are scored on a range of values, i.e. different items have different scoring points or attitude scales in which the item responses are in continuum (Oluwatayo 2012). This coefficient varies from 0 to 1, and a value of 0.6 or less generally

indicates unsatisfactory level of internal consistency (Malhotra& Birks, 2007). Based on the pilot survey the result for cronbach alpha was found to be more than 0.6.

3.6.Procedures of Data Collection

Since the samples of the study are kenema pharmacy customers in Addis Ababa with different educational background, it is found necessary to translate the questionnaire into Amharic language before distributing the questionnaire.

Eight Kenema Pharmacy branches were selected randomly through lottery out of 14 Kenema pharmacy branches. And the 384 questionnaires were distributed among the eight branches equally, 48 questionnaires for each. While collecting the data, the data collector enters to the branch and gets the permission to administer the questionnaires, then starts by giving two questioners to two customers randomly. Then continues the process by giving two questioners for another two customers that enter to the branch every two minutes until all the 48 questionnaires per branch was administered.

3.7.Method of Data Analysis

With regard to data analysis, the study utilizes both descriptive statistical analysis and regression analysis. Descriptive statistics was used mainly to organize and summarize the demographic data of the respondent as well as their overall perception towards the marketing mix elements and brand preference.

On the other hand, regression analysis will be used to measure the effect of as measured by "promotion", "product quality", "availability", and "price" on consumers' brand preference.

3.8.Ethical Issues

In the context of research, ethics is defined as the appropriateness of the researcher's behavior in relation to the rights of the participants or subjects of the research work (Saunders, Lewis& Thornhill 2009). This study was governed by the general rules of research ethics in such a way that respondents are requested to provide information on voluntary basis, there will be prior communication about the purpose of the study, and confidentiality of the information was guaranteed. Moreover, the researcher, to the best of his level has abided by the rules and regulations of the University and conducted the study on the basis of objective judgment.

Chapter Four

4. Results and discussions

In this chapter, the data collected through survey is analyzed using statistical tool of SPSS Version 22. First, the survey response rate and the reliability of the scales used are discussed followed by discussion on the respondent's profile and the result of the multiple regression analysis is presented.

4.1.Sample and response rate

After distributing 385 questionnaires the respondents found in the randomly selected drug stores and pharmacies, a total of 343 answered questionnaires were retrieved, which is 89% of the total distributed questionnaires. After checking the retrieved questionnaires, the 321 questionnaires were valid for statistical analysis. Ultimately, 79% of the total questionnaires distributed entered the analysis.

4.2.Descriptive statistics

4.2.1. Respondents' profile

In this section, the basic demographic profile of the respondents such as age, sex, education level and occupation are presented.

i. Age of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-30	96	29.9	29.9	29.9
	31-40	132	41.1	41.1	71.0
	41 -50	63	19.6	19.6	90.7
	51 and above	30	9.3	9.3	100.0
	Total	321	100.0	100.0	

Table 1Descriptive statistics respondents' age

Source-Survey results (June 2016)

Out of the total 321, 132 (41.1%) of the respondents fall under the age category 31-40 years followed by those in the category 18-30 which are 29.9%. The rest fall in the age category of 41-50 and 51 and above age groups with 19.6 % and 9.3% respectively.

ii. Sex of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	186	57.9	57.9	57.9
	Female	135	42.1	42.1	100.0
	Total	321	100.0	100.0	

Table 2Descriptive statistics respondents'sex

Source-Survey results (June 2016

On the other hand, looking at the distribution of the respondents in terms of gender, male respondents (57.9%) are higher than the female respondents (42.1%). However, it can be said that both male and female respondents are fairly represented in the study. (See Table 2)

iii. Educational Status of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below high school	60	18.7	18.7	18.7
	High school	60	18.7	18.7	37.4
	Diploma	81	25.2	25.2	62.6
	First degree	120	37.4	37.4	100.0
	Total	321	100.0	100.0	

Table 3Descriptive statistics respondents' educational status

Source-Survey results (June 2016)

In terms of education, respondents with first degree and diploma have the highest share comprising 37.4% and 25.2%, respectively. Those with secondary and primary level of education constitute 18.7 % each. In there is no respondent that has an education more than first degree. (See Table 3)

iv. Occupation of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	40	12.5	12.5	12.5
	Employee	120	37.4	37.4	49.8
	Business owner	101	31.5	31.5	81.3
	Other	60	18.7	18.7	100.0
	Total	321	100.0	100.0	

Table 4Table 5Descriptive statistics respondents'occupation

Source-Survey results (June 2016

With respect to occupation, majority of the respondents are employees covering 37.4% followed by business owners (31.5%). 40 of the respondents are students constituting 12.5% while the remaining are categorized as others such as unemployed, retired and house wives. (Table 4).

4.2.2. Descriptive analysis

i. Marketing mix elements

The mean scores have been computed for all the four marketing mix Respondents were asked to rate their perception on a five-point Likert type scale ranging from 1 being strongly disagree to 5 strongly agree for marketing mix attributes.

The first marketing mix attribute is product quality which is further divided into five attributes (image, brand names, reputation, performance and features). The mean scores have been computed for all the five attributes of product quality. The result is presented in Table 6.

product quality Dimensions	N	Mean	Std. Deviation
product quality (bad image Vs good image)	321	3.37	.701
product quality(less branded Vs highly branded)	321	3.41	.894
product quality (bad reputation Vs good reputation)	321	3.35	.924
product quality (bad performance Vs good performance)	321	3.35	.900
product quality (bad features Vs good features)	321	3.22	.701
c product quality	**321**	**3.3421**	**.824**
Valid N (list wise)	321		

Table 6Descriptive analysis of product quality items

Source-Survey results (June) 2016

The second attribute is promotion which again is further divided into five attributes (detailing, sales promotion, public relations, personal selling and advertizing) the mean scores have been computed for all the five attributes of promotion. The result is presented in Table7.

promotion Dimensions	N	Mean	Std. Deviation
promotion (less detailed Vs well detailed)	321	3.19	.873
promotion (less sales promoted Vs highly sales promoted)	321	3.14	.829
promotion (bad public relations Vs good public relations)	321	3.39	.978
promotion (bad personal selling Vs good personal selling)	321	3.29	1.171
promotion (less advertized Vs well advertized)	321	3.14	1.096
promotion	**321**	**3.2305**	**.88498**
Valid N (listwise)	321		

Table 7Descriptive analysis of promotion

Source-Survey results (June 2016

The third variable is product availability which is further divided into five attributes (attractive, classy, beautiful, elegant and sexy). The mean scores have been computed for all the five attributes of availability. The result is presented in Table 8.

product availability	N	Mean	Std. Deviation
product availability (not readily available Vs readily available)	321	3.59	1.392
product availability (unsustainable supply system Vs sustainable supply system)	321	3.03	1.305
product availability (inconveniently available Vs conveniently available)	321	3.12	1.135
product availability (not widely Vs widely)	321	3.37	1.379
product availability (not promptly Vs promptly)	321	3.60	1.158
product availability	321	3.3421	1.10759
Valid N (listwise)	321		

Table 8Descriptive analysis of product availability

Source-Survey results (June 2016

The fourth variable is price of a product which is further divided into four attributes (low price, price sensitivity, affordable price, and competitive price). The mean scores have been computed for all the four attributes. The result is presented in Table 9.

Price	N	Mean	Std. Deviation
Price (high price Vs low price)	321	3.00	.868
Price (less price sensitive Vs highly price sensitive)	321	3.00	.868
Price (not affordable Vs affordable)	321	3.00	.868
Price (not competitive Vs competitive)	321	2.87	1.167
Price	**321**	**2.9657**	**.92807**
Valid N (listwise)	321		

Table 9Descriptive analysis of price

Source-Survey results (June) 2016

ii. Brand preference

The respondents from the dependent variable side were captured using three items "inquire about", "consider prefers", and "definitely prefers" with five point Likert scale.

The result of the survey revealed that the mean scores for all the three attributes range from 2.309 for definitely prefer to 3.69 for inquire about and consider prefer.

Brand Preference dimensions	N	Mean	Std. Deviation
Brand Preference-I will inquire about marketing mix element of pharmaceutical products.	321	3.69	1.039
Brand Preference -I will consider preferring/using marketing mix elements of pharmaceutical products.	321	3.69	1.039
Brand Preference -I will actually preferring /using marketing mix element of pharmaceutical products.	321	3.09	1.054
Brand Preference	**321**	**3.4860**	**1.01648**
Valid N (listwise)	321		

Table 10Descriptive analysis brand preference items

Source-Survey results (June) 2016

4.3.Reliability test

In general, reliability is used to test the internal consistency among the variables or items through a summated scale (Hair et al., 1996). Cronbach's Alpha is used to measure how well a set of items (or variables) measure a single uni-dimensional latent construct. (Malhotra, 2007). Cronbach's Alpha is low when data have a multi-dimensional structure. Malhotra, (2007) suggests that an alpha of 0.60 or greater should be considered adequate to develop a new questionnaire. Therefore, a low coefficient alpha indicates the sample of items perform poorly in capturing the construct motivating the measure. Conversely, a large coefficient alpha implies that the k-items test correlates with the true scores closely Malhotra, (2007).

Accordingly, the cronbach alpha value for all the scales was found to be greater than 0.6. As can be seen from Table 11 for all the scales the value for cronbach alpha is closer to one.

Variable	Cronbach-Alpha	No. of items
Product availability	0.983	5
promotion	0.932	5
product quality	0.888	5
price	0.983	4
brand preference	0.973	3

Table 11 Reliability test

Source-Survey results (June 2016

4.4.Correlation

Pearson correlation test was conducted to know the degree of relationship between the independent variables, which are product quality, promotion, product availability and price and the dependent variable brand preference. As it is indicated in the table the independent variables, which are product quality, promotion, availability and price have a significant positive correlation with the dependent variable brand preference with correlation coefficient 0.694, 0.621, 0.340 and 0.349 respectively. The results of the correlation between these variables are shown in Table.

Correlations

		product quality	promotion	Availability	price	brand preference
product quality	Pearson Correlation	1	.322**	.143*	.331**	.694**
	Sig. (2-tailed)		.000	.010	.000	.000
	N	321	321	321	321	321
promotion	Pearson Correlation		1	.578**	.162**	.621**
	Sig. (2-tailed)			.000	.004	.000
	N		321	321	321	321
Availability	Pearson Correlation			1	.149**	.340**
	Sig. (2-tailed)				.007	.000
	N			321	321	321
price	Pearson Correlation				1	.349**
	Sig. (2-tailed)					.000
	N				321	321
brand preference	Pearson Correlation					1
	Sig. (2-tailed)					
	N					321

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 12 Correlation matrix

Source-Survey results (June) 2016

4.5.Assumption test

Meeting the assumptions of regression analysis is necessary to confirm that the obtained data truly represented the sample and that researcher has obtained the best results (Hair et al., 1998). Two assumptions for regression analysis used in this study will be discussed for the individual variables:

multi-collinearity and linearity (Hair et al., 1998). In the following paragraphs, each assumption is explained.

4.5.1. Multi-Colliniarity

Multicollinearity refers to the situation in which the independent/predictor variables are highly correlated. When independent variables are multicollinear, there is "overlap" or sharing of predictive power (Dillon, 1993). This may lead to the paradoxical effect, whereby the regression model fits the data well, but none of the predictor variables has a significant impact in predicting the dependent variable (Robert, 2006). This is because when the predictor variables are highly correlated, they share essentially the same information. Thus, together, they may explain a great deal of the dependent variable, but may not individually contribute significantly to the model (Robert, 2006). Thus, the impact of Multicollinearity is to reduce any individual independent variable's predictive power by the extent to which it is associated with the other independent variables. That is, none of the predictor variables may contribute uniquely and significantly to the prediction model after the others are included.

The Multicollinearity in this study was checked using the Tolerance and VIF value. As it is showed in the Table 13all independent variables have a Tolerance value greater than 0.2 and VIF value less than 10. The VIF, which stands for variance inflation factor, is computed as "1/tolerance," and it is suggested that predictor variables whose VIF values are greater than 10 may merit further investigation (Robert, 2006).

Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1			
	product quality	.811	1.232
	promotion	.607	1.647
	price	.880	1.136
	Availability	.658	1.519

a. Dependent Variable: b preference

Table 13 Multicollinearity test

Source-Survey results (June 2016

4.5.2. Linearity

The linearity of the relationship between the dependent and independent variable represented the degree to which the change in the dependent variable is associated with the independent variable (Hair et al., 1998). In a simple sense, linear models predict values falling in a straight line by having a constant unit change (slope) of the dependent variable for a constant unit change of the independent variable (Hair et al., 1998). Conventional regression analysis will underestimate the relationship when nonlinear relationships are present, i.e., R2 underestimates the variance explained overall and the betas underestimate the importance of the variables involved in the non-linear relationship (Malhotra et al. 2007). Substantial violation of linearity implies that regression results may be more or less unusable (Malhotra et al. 2007).

The scatter plot of standardized residuals versus the fitted values (see, Appendix A) for the regression models were visually inspected. The plots did not reveal any systematic pattern, thus providing support for the specified linear relationship, as suggested by (Malhotra et al. 2007).

4.5.3. Normality

In terms of this assumption, a check for normality of the error term is conducted by a visual examination of the normal probability plots of the residuals (Malhotra et al., 2007). Malhotra et al. (2007) propose that normal probability plots are often conducted as an informal means of assessing the non-normality of a set of data. According to Hair et al. (1998), the plots are different from residuals plots in that the standardized residuals are compared with the normal distribution. In general, the normal distribution makes a straight diagonal line, and the plotted residuals are compared with the diagonal (Hair et al., 1998). If a distribution is normal, the residual line will closely follow the diagonal (Hair et al., 1998). Malhotra et al. (2007) explain that the "correlation coefficient" will be near unity if the data fall nearly on a straight line. The "correlation coefficient" will become smaller if the plot is curved. The normality probability plots were plotted to assess normality (Appendix A). The P-P plots were approximately a straight line instead of a curve. Accordingly, the residuals were deemed to have a reasonably normal distribution, as suggested by Hair et al. (1998).

4.6.Regression Analysis

In order to indicate how well a set of independent variables are able to predict the dependent variable and to analyze the conceptual framework, in this study four independent variables and one independent variable were entered to the multiple regression equation. This section reports the result of multiple regressions. Linear regression estimates the coefficient of the linear equation, involving one or more independent variables that best predict the value of the dependent variable (Robert, 2006). The multiple regression equation is:

$\square' = A + B_1X_1 + B_2X_2 + \ldots\ldots\ldots\ldots B_nX_n$

Where $\square'$=the predicted dependent variable

A= constant

B=unstandardized regression coefficient

X=value of the predicted coefficient

Thus, in this study the following multiple equations were used to predict the level of preference from the five independent variables:

□□ **=A+ B_1 (product quality) + B_2 (promotion) + B_4 (price)**

Where: BP=brand preference

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818[a]	.669	.664	.58892

a. Predictors: (Constant), product quality , promotion, price, Availability

b. Dependent Variable: brand preference

Table 14 Model summary brand preference dimentions

Source-Survey results (June 2016

The model in Table 14 shows how much of the variance in the measurement of brand preference is explained by the model. Based on this, model coefficient of determination or R2 obtained indicates that 66.9% of the variation in the measurement (brand preference) function can be explained by; product quality, promotion, Availability and price. The remaining 33.1% of variations on brand preference are explained by other of this model or variables which are not incorporated in this study. variables out

Among the four independent variables, multiple regression analysis revealed that product quality, promotion, and price were a significant predictor of consumers brand preference by the p-

value($p<0.05$), while the influence of Availability ($p=0.904$) on brand preference was not found significant.

The nature of relationship was positive for product quality ($\beta=0.514$), promotion, ($\beta=0.441$) and price ($\beta=0.107$) and on the other hand Availability display negative influence on brand preference with ($\beta= -0.027$).

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	-1.029	.190		-5.428	.000	-1.403	-.656		
product quality	.762	.053	.517	14.387	.000	.658	.866	.811	1.232
promotion	.506	.048	.441	10.601	.000	.412	.600	.607	1.647
price	.117	.038	.107	3.107	.002	.043	.192	.880	1.136
Availability	-.004	.037	-.005	-.121	.904	-.077	.068	.658	1.519

a. Dependent Variable: b preference

Table 15 Regression coefficients

Source-Survey results (June 2016

As can be seen from the above table, the marketing mix measures have positive effect on consumers' brand preference, among which product quality has the highest effect with coefficient 0.763, followed by promotion (0.503), and Price (0.117). However, Availability (0.001) has been found to be insignificant at 95% confidence interval.

4.7.Hypothesis Testing and Discussion of Results

On this section the major findings of the study is discussed and point out their implications.

***H1**): -Product quality of the medicine has a positive influence on consumers brand preference - Supported*

***H2**): -Promotion of the medicine has a positive influence on consumers brand preference Supported*

In this study both product quality and promotion have statistically significant positive influence on consumer's brand preference of medicines.

In selecting a marketing mix, marketers need to focus on the product quality and promotion of the medicines.. In addition priority should be given for the two attributes.

***H3**): -product availability of the medicines has a positive influence on consumers brand preference -Not Supported*

Product availability of the medicines has statistically insignificant positive influence on consumers brand preference. The result of this study however did not support this hypothesis. In addition this result is in contradiction with previous research works.

***H4**): - Price of a medicine has a positive influence on consumers brand preference. –Supported.*

Price of a medicine has positive effect on consumers' intention to use the drugs having a coefficient of 0.117. Since the t-significance test indicates the significance of the coefficient, the hypothesis H4 is accepted.

The results of the hypothesis testing are summarized in Table 16.

Hypothesis	Independent variables	Hypothesized sing and significance	Result from multiple regression	Reason
H1	**product quality**	**Positive and significant effect on brand preference**	**Supported**	***B=0.517 P<0.05***
H2	**promotion**	**Positive and significant effect on brand preference**	**Supported**	***B=0.441 P<0.05***
H3	**Product availability**	**Positive and significant effect on brand preference**	**Not supported**	***B=0.005 P >0.05***
H4	**price**	**Positive and significant effect on brand preference**	**Supported**	***B=0.107 P<0.05***

Table 16 Hypotheis testing result summury

Source: Survey result (june, 2015)

Chapter Five

5. Conclusion and Recommendation

This chapter summarizes the findings of the study together with possible recommendations. It also discusses the limitation of this study and proposes further area of research.

5.1.Summary of findings

The attributes of promotion, product quality, and price have positive effect on the consumer's brand preference to the medicines they buy. Among the attributes, product quality and promotion have the highest influence on consumers' brand preference. Product availability however was not found to have a significant effect on consumers' brand preference.

5.2.Conclusion

This study has investigated the impact of marketing mix elements on brand preference with special reference to pharmaceutical market. The results revealed that there is strong relationship between marketing mix elements (price, product and promotion) and brand preference. On the basis of the findings of this study, it can be concluded that price, product, and promotion were jointly and independently predict brand preference. This result supported Kotler, (2005) who discovered that marketing mix elements have become major business tools for company to pursue its marketing objective, it is concluded that marketing mix elements have significant effect on brand preference. Therefore, management of pharmaceutical importing and manufacturing companies needs to; promote widely, charge competitive price, deliver superior products. They also need to pay more attention to

customers in order to understand their needs and expectations as well and to keep in touch with them. Customers'' satisfaction surveys should be conducted in a systematic and continues way.

The survey was conducted on kenema pharmacy branches found in Addis Ababa. Multiple regression analysis was used to examine the effect of marketing mix. The result of the survey reveals that marketing mix, as measured by perceived product quality, promotion and price, positively and significantly affect consumers' brand preference. However, both product quality, and promotion, has the highest influence on consumers brand preference.

In this study both product quality and promotion of medicines have statistically significant positive influence on consumer's brand preference.

In selecting a marketing mix, marketers need to focus on the product quality and promotion of medicines. In addition priority should be given for the two attributes in choosing marketing mix, as these two attributes have a higher influence on customers brand preference.

Price has also positive effect on consumers' brand preference. Product availability of medicine has statistically insignificant positive influence on consumers brand preference. The result of this study however did not support this hypothesis.

5.3.Recommendation

Marketing mix elements measured by the attributes of product quality, promotion of medicines, and Price have a significant positive influence on the consumers brand preference. The implication is that marketers in the industry should consider the use of marketing mix promotional endeavors so as to grab consumers brand preference.

5.4.Limitations and Suggestions for future research

The study focused only on marketing mix elements on pharmaceutical industry, so the result of the study is limited to the industry, it may not apply for other sector.

- This study examined the effect of marketing mix elements on customers brand preference of medicines. So the effect of marketing mix elements on other sectors of the economy could be studied.

- Similar studies could also be done by incorporating the influence of brand equity on brand preference.

Annex

Questionnaire

Questionnaire

Dear Sir/Madam

My name is simon yirga and I am M.A. student at Addis Ababa University, School of Commerce. I am collecting data to study marketing mix elements influence towards customers brand preference of medicines. Hence I would like to request your kind cooperation to feel this questionnaire. The information you provided will be used only for academic purpose and will be kept confidential.

Should you have any inquiries please do not hesitate to contact me with simayir27@yahoo.com I thank you!

Part I: Demographic profile

Please answer by putting a thick mark (_I)in the box provided

.

1. Age ☐ 18-30 ☐ 31-40 ☐ 41-50 ☐ 51 & above
2. Gender ☐ Male ☐ Female
3. Educational ☐ Below high school ☐ High school ☐ Diploma
4. Occupation ☐ 1st Degree ☐ 2nd Degree & above ☐ Other_____
5. Do you have a bank account in any bank? ☐ Yes ☐ No

Part II: Perception towards the marketing mix

6. . Please circle the number that best reflect your feeling towards the product quality of medicines

6.1.	bad image	1	2	3	4	5	good image
6.2.	less branded	1	2	3	4	5	highlybranded
6.3.	bad reputation	1	2	3	4	5	good reputatio
6.4.	bad performance	1	2	3	4	5	good performa
6.5.	bad feature	1	2	3	4	5	good feature

7. Please circle the number that best reflect your feeling towards the promotion of medicines.

7.1.	less detailed	1	2	3	4	5	well detailed
7.2.	less sales promoted	1	2	3	4	5	high sale promote
7.3.	bad public .relation	1	2	3	4	5	good pub.relation
7.4.	bad personal sailing	1	2	3	4	5	good personal sal
7.5.	less advertized	1	2	3	4	5	well advertized

8. Please circle the number that best reflect your feeling towards the availability of medicines.

8.1.	notreadilyavailable	1	2	3	4	5	readilyavailable
8.2.	unsustainable	1	2	3	4	5	sustainable
8.3.	inconveniently	1	2	3	4	5	conveniently
8.4.	not widely	1	2	3	4	5	widely
8.5.	Not promptly	1	2	3	4	5	promptly

9. Please circle the number that best reflect your feeling towards the price of a medicine

9.1.	high price	1	2	3	4	5	low price
9.2.	less price sensitive	1	2	3	4	5	price sensitive
9.3.	not affordable	1	2	3	4	5	affordable
9.4.	not competitive	1	2	3	4	5	competitive

Part III: brand preference

Please circle the number that reflects best your feeling.

Purchase intention	**Strongly disagree**	**disagree**	**Neutral**	**Agree**	**Strongly agree**
Brand Preference-I will inquire about marketing mix element of pharmaceutical products.	1	2	3	4	5
Brand Preference -I will consider preferring/using marketing mix elements of pharmaceutical products.	1	2	3	4	5
Brand Preference -I will actually preferring /using marketing mix element of pharmaceutical products.	1	2	3	4	5

Thank you for your honest, accurate and timely response.

Reference

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