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**The Effect of Consumers' Attitude on the Purchase
Intentions of Imported Pharmaceutical Products in Ethiopia**

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Abstract

Consumers attitude is a central concern of both product and service marketers that it is difficult to imagine any consumer research project that does not include the measurement of some aspect of consumer attitudes. Ethiopia which is classified by the world bank as a low-income country, has a population of 91.73 million people and per capita public health spending was 16.60USD, and of the total private expenditure on health care, 79.8% was out-of-pocket (Gedif, 2016). Therefore, this study is intended to measure the attitude of consumers in a developing economy like Ethiopia towards imported pharmaceuticals. After reviewing relevant literature, a research model was adapted and five hypotheses were developed. The research approach was deductive and quantitative in nature which tried to test the credibility of the adapted attitude model in the context of the pharmaceutical sector in Ethiopia. Besides, the research design used in this study was explanatory in nature. 384 questionnaires were distributed where 296 of them were returned back and 223 were found to be useful for analysis. Both descriptive and inferential statistics were used and SPSS version 24 was used for running the statistical result. Related to the findings, the study revealed that consumers' cognition, normative belief, social influence, product attributes, and utilitarian value mean score was greater than 3. The degree and direction of association or covariance between the five dimensions of consumer attitude and purchase intention was tested through correlation analysis. The Pearson correlation (r) was found to be all positive and moderate except that of utilitarian value which showed a weak relation ($r = 0.149$). The multiple regression analysis revealed that 44.2% of consumers' purchase intention of pharmaceuticals is explained by cognition, normative belief, social influence, product attributes, and utilitarian value. Besides, it was found out that the three hypotheses were confirmed and two hypotheses were rejected.

Key Words: Attitudes, country of origin, cognition, normative belief, social influence, product attribute, utilitarian value, purchase intention,

List of Abbreviations

API: Active Pharmaceutical Ingredient

COO: Country of Origin

FMHACA: Food, Medicine, Health Care Administration and Control Authority

FMOH: Federal Ministry of Health

GMP: Good Manufacturing Practice

PFSA: Pharmaceutical Fund and Supply Agency

USD: United States Dollar

WHO: World Health Organization

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CHAPTER 1 INTRODUCTION

1.1 Background of the Study

Awareness of consumer attitudes is such a central concern of both product and service marketers that it is difficult to imagine any consumer research project that does not include the measurement of some aspect of consumer attitudes. In a consumer behavior context, an attitude is a learned predisposition to behave in a consistently favorable and unfavorable way with respect to a given object. The formation of consumers' attitudes is strongly influenced by personal experience of family and friends, direct marketing and mass media (Schiffman and Kanuk, 2000).

Marketers can use their knowledge of consumer attitudes to develop two types of strategies. One strategy reinforces existing attitudes; another tries to change them. Strategies that reinforce attitudes may be easier to implement, but there may be compelling reasons to try to change attitudes. Consumers' attitudes are easier to change if there is little self-identification with the product and little emotional attachment to it. When consumers have a high level of involvement with a product, they will accept messages only if the messages agree with their beliefs. When involvement is low, consumers are more likely to accept a message even if it does not agree with prior beliefs (Assael, 2001).

An attitude survey is like a snapshot taken at a single point in time. It may tell us a lot about the position of a person, issue or object at that moment, but it does not permit many inferences about progress made over time or any predictions about possible future changes in consumer attitudes. To accomplish these tasks, it is necessary to develop an attitude-tracking programme. This activity helps to increase the predictability of behavior by allowing researchers to analyze attitude trends over an extended period of time (Solomon et al, 2006).

Consumers' tendency to act toward an object is generally measured in terms of intention to buy. Measuring buying intent is particularly important in developing marketing strategies. Once

consumers evaluate brands, they intend to purchase the one achieving the highest level of expected satisfaction. Purchasing in complex decision making is not likely to be immediate. The time lag between intention and purchase is likely to be greater in complex decision making because of the greater number of actions required for a purchase to take place. For many goods, the decision and purchase are almost simultaneous because consumers make the brand decision in the store. Buying intentions are generally measured on a scale from “definitely will buy” to “definitely will not buy”. The percentage of consumers saying they will definitely buy is a closely watched figure because studies have shown a close relationship between this percentage and subsequent trial of a new product (Assael, 2001).

A product’s country of origin in some cases is an important piece of information in the decision making process. A product’s origin, then, is often used as a signal of quality. Certain items are strongly associated with specific countries, and products from those countries often attempt to benefit from these linkages. Countries, in their turn, can be very protective of product names which potentially provide them with an important competitive advantage in winning customers (Solomon et al, 2006).

Recent evidence indicates that learning of a product’s country of origin is not necessarily good or bad. Instead, it has the effect of stimulating the consumer’s interest in the product to a greater degree. The purchaser thinks more extensively about the product and evaluates it more carefully. The origin of the product can thus act as a product attribute that combines with other attributes to influence evaluations. In addition, as stated by Solomon et al, (2006) the consumer’s own expertise with the product category moderates the effects of this attributes. When other information is available, experts tend to ignore country of origin information, whereas novices continue to rely on it. However, when other information is unavailable or ambiguous, both experts and novices will rely on this attribute to make a decision.

The Food, Medicine and Health Care Administration and Control Authority (FMHACA) authorizes the marketing and registration of medicines in Ethiopia. Imported products are charged a higher fee (700-800USD) than locally produced products (22USD). Manufacturers are

licensed; overseas manufacturers are inspected every five years against FMHACA\GMP guidelines whereas local manufacturers are inspected twice yearly (Gedif, 2016).

Ensuring access to medicine is complex; it requires governments, through their policies, to balance the availability of quality assured medicines, whilst ensuring that they are affordable, and at the same time meeting the priority health needs of the population. An increasing number of governments in middle-income and low-income countries are supporting local production of medicines in the expectation that it will result in increased medicine availability and lower medicine prices. Ethiopia which is classified by the world bank as a low-income country, has a population of 91.73 million people and per capita public health spending was 16.60USD, and of the total private expenditure on health care, 79.8% was out-of-pocket (Gedif, 2016). Therefore, this study is intended to measure the attitude of consumers in a developing economy like Ethiopia towards imported pharmaceuticals.

1.2 Statement of the Problem

With the rapid growth of pharmaceutical marketing, several concerns have been raised. The sale and marketing of prescription drugs should not be governed solely by profit motives and market share incentives. The pharmaceutical industry needs to be cognizant of a duty towards their clients (Limbu, 2009).

Pharmaceuticals represent a large portion of the costs in the health care system. According to WHO (2011) report, pharmaceuticals account for 20-60% of health spending in developing and transitional countries. Poor availability of essential drugs is the key barrier to access to medicine especially in public sector where generic medicines availability is less than 60% across WHO regions, ranging from 32% in the Eastern Mediterranean region to 58% in the European region (WHO, 2011, cited in Mudzteba, 2014). In the poorest countries of Africa and Asia, as much as 50% of the population lacks such access. While some 10 million lives a year could be saved by improving access to essential medicines and vaccines - 4 million in Africa and South-East Asia alone (WHO/HAI, 2008, cited in Mudzteba, 2014).

No active pharmaceutical ingredients (APIs) are manufactured in Ethiopia, however, there are only 9 manufacturers of finished dose forms (medicines). The definition of 'local production' in Ethiopia refers to the manufacturing of finished dose forms. Moreover, medicine prices are not controlled in Ethiopia, nor are prices monitored. When procuring medicines, the government has a local preference of upto 25%, i.e., the government will pay upto 25% more for locally produced medicines than for imports. Patients pay for medicines out-of-pocket in public sector outlets (Gedif, 2016).

Imported pharmaceutical products in Ethiopia have limitations in terms of lack of accessibility to every consumer due to their relatively higher prices. The lack of health insurance in the country makes it difficult for consumers to use out of pocket expenditures in order to meet their health needs. This results in low level of access to medications, more importantly, essential medicines because of unaffordable prices of imported pharmaceutical products. Besides, there is no significant system for evaluation of pharmaco-economic value of imported pharmaceutical products. This is also decreases the accessibility of medicines to the intended users.

Another critical aspect of the problem has been the acute shortage of supply of these medications due to limitation of foreign currency allotted for the pharmaceutical industry. As a result, it has been observed in recent times that there has been a shortage of many essential drugs, chronic medications and many life saving drugs that are imported due to different and thus patients are exposed to lack of medications as well as they are subjected to further price increments of their medications.

However, regardless of the stated practical problems, the effect of consumers' attitude towards imported pharmaceutical products is not adequately studied in developing countries in general and in Ethiopia in particular. Therefore, the empirical and practical gaps stated above substantiate the need for undertaking a study on the effect of consumers' attitude on the purchase intentions of imported pharmaceutical in Ethiopia.

1.3. Research Questions

1. In what way does consumers' cognition of imported pharmaceuticals influence their purchase intentions in the context of Ethiopia?
2. In what way does normative belief influence the consumers' purchase intentions of imported pharmaceuticals in Ethiopia?
3. To what extent does social influence affect the purchase intentions of consumers' in Ethiopia?
4. To what extent does product attribute of imported pharmaceuticals influence consumers' purchase intentions in Ethiopia?
5. In what way does utilitarian value of imported pharmaceuticals influence consumers' purchase intentions in Ethiopia?

1.4. Objective of the Study

1.4.1 General objective

The general objective of this study was to examine the effect of consumers' attitude on the purchase intentions of imported pharmaceuticals in Ethiopia.

1.4.2 Specific objectives

The following are the specific objectives of the study

1. To examine the effect of consumers' cognition of imported pharmaceuticals on their purchase intentions in Ethiopia.
2. To investigate the influence of normative belief on the purchase intentions of consumers' of imported pharmaceuticals in Ethiopia.
3. To examine the effect of social influence on the purchase intentions of consumers' in Ethiopia.
4. To analyze the influence of product attributes of imported pharmaceuticals on consumers' purchase intentions in Ethiopia.
5. To find out the effect of the utilitarian value of imported pharmaceuticals on consumers' purchase intentions in Ethiopia.

1.5. Scope of the study

This study covered respondents only in Addis Ababa. Patients and pharmacists only in limited parts of Addis Ababa were covered in this study, due to time and resource limitations. In addition to this, the type of pharmaceutical products that were included in this study were only over-the-counter and prescription medications. Besides, the study examined the effect of consumers cognition, normative belief, social influence, product attributes, and utilitarian value which have been adapted from the tri-component attitude model and multi-attribute attitude theories. These dimensions have been relevant and appropriate to measure consumers' attitudes towards purchase intention of pharmaceuticals. Other dimensions of attitude, therefore, are beyond the scope of this study.

1.6. Significance of the study

There are limited works that has been carried out on the consumers' attitudes and their purchase intentions of imported pharmaceutical products. Thus, this study will add value for the health sector regarding the attitudes of patients on imported pharmaceuticals and their implications on the purchase intentions of the patients.

The study primarily will serve as a base for other studies into the field of consumers' attitude in Ethiopia, especially in the pharmaceutical industry. It is hoped the information that will be collected by the researcher, will be beneficial to pharmaceutical companies and manufacturer's, academicians and researchers in general. The study will be significant in that it assess the effects of consumers' attitude on the purchase intentions of imported pharmaceuticals. The research will focus on identifying the gaps that are created due to consumers attitude on imported pharmaceuticals and thus, will help health care providers and pharmacists to have a deeper understanding of the situation and act accordingly.

1.7. Definition of Terms

Attitudes: 'a learned predisposition to behave in a consistently favorable and unfavorable way with respect to a given object.' (Schiffman and Kanuk, 2000)

Attitude Object: ‘a consumer oriented definition of attitude and should be interpreted broadly to include specific consumption or marketing related concepts, such as product, product category, brand, service, possessions, product use, causes or issues, people, advertisement, price medium or retailer. ‘ (Schiffman and Kanuk, 2000) ‘Anything towards which one has an attitude is called an attitude object.’ (Solomon et al., 2006)

Intention to buy: ‘Buying intentions are generally measured on a scale from “definitely will buy” to “definitely will not buy”’(Assael, 2001).

Pharmaceutical products: ‘More commonly known as medicines or drugs, are a fundamental component of both modern and traditional medicine. It is essential that such products are safe, effective, and of good quality, and are prescribed and used rationally.’ (WHO, 2011)

Country of Origin: Is the country of manufacture, production or growth where an article or product comes from (Schiffman and Kanuk, 2000).

Cognition: Is the mental action or process of acquiring knowledge and understanding through thought, experience and the senses (Schiffman and Kanuk, 2000).

Normative Belief: Some groups and individuals exert a greater influence than others and affect a broader range of consumption decisions. This type of influence is normative influence—that is, the reference group helps to set and enforce fundamental standards of conduct (Solomon et al., 2006).

Social Influence: As a member of a large society, people share certain cultural values or strongly held beliefs about the way the world should be structured. Other values are shared by members of subcultures, or smaller groups within the culture, such as ethnic groups, teens, people from certain parts of the country (Solomon et al., 2006).

Utilitarian Value: The utilitarian function is related to the basic principles of reward and punishment. (Solomon et al., 2006) Utilitarian appeals involve informing the consumer of one or more functional benefits that are important to the target market (Hawkins and Mothersbaugh, 2010).

Product Attribute: A product attribute is a characteristic that defines a particular product and will affect a consumer's purchase decision. Product attributes can be tangible or intangible in nature (Schiffman and Kanuk, 2000).

1.8. Organization of the Study

The study was constructed in the following way, consisting of 5 chapters.

Chapter 1: Discusses the chosen subject in general and defines the problem. The first chapter ends up with the research gap which leads to the research purpose and research questions.

Chapter 2: Reviews the relevant concepts and theories from previous studies and literature. Based on this the model was developed which includes different hypotheses.

Chapter 3: Includes the methodology of the study

Chapter 4: Data collected is presented and analyzed in this chapter

Chapter 5: Result is discussed, conclusions are drawn, limitations are discussed and practical implications are suggested based on the findings.

CHAPTER 2 LITERATURE REVIEW

2.1. Theoretical Review

2.1.1. Attitudes

There is general agreement that attitudes are learned. This means that attitudes relevant to purchase behavior are formed as a result of direct experience with the product, information acquired from others or exposure to mass media advertising and various forms of direct marketing (Schiffman and Kanuk, 2000).

One approach to attitude formation suggests that attitudes are based on *cognitions (thoughts)* or beliefs. This means that attitudes can be based on thoughts we have about information received from an external source (such as advertising, salespeople, the Internet, or a trusted friend) or on information we recall from memory (Hoyer and MacInnis, 2008).

A second approach suggests that attitudes are based on *emotions*. Sometimes we have a favorable attitude toward an offering simply because it feels good or seems right. Likewise, we can acquire attitudes by observing and vicariously experiencing the emotions of others who use an offering (Hoyer and MacInnis, 2008).

Another characteristic of attitudes is that they are relatively consistent with the behavior they reflect. However, despite their consistency, attitudes are not necessarily permanent; they do change. When consumers are free to act as they wish, we anticipate that their actions will be consistent with their attitudes. However, circumstances often preclude consistency between attitudes and behavior (Schiffman and Kanuk, 2000).

In addition, attitudes can be described in terms of their resistance to subsequent change. Consumers may change attitudes easily when they are not loyal to a particular brand or know

little about a product. However, attitude change is more difficult when consumers are brand loyal or consider themselves experts in the product category(Hoyer and MacInnis, 2008).

Modern consumers choose among products made in many countries. European consumers may buy Portuguese, Italian or Brazilian shoes, Japanese cars, clothing imported from Taiwan, or microwave ovens built in south Korea. Consumers' reactions to these imports are mixed. In some cases, people have come to assume that a product made overseas is better of quality, whereas in other cases the knowledge that a product has been imported tends to lower perceptions of product quality. In general, people tend to rate their own country's products more favorably than do foreigners, and products from industrialized countries are rated better than are those from developing countries(Solomon etal, 2006).

Like brand names, country of origin information provides consumers with cognitive-based information, as well as prompting affective-based reactions. Although the research results on country of origin effects are mixed, it is clear that the 'made in' label can be important to the consumer depending on the consumption situation and the level of involvement the consumer feel towards the product or service. With the rise in patriotism, regionalism and ethnic identity around the world, multinational and regional countries, as well as country-sponsored export agencies, will continue to promote their country and its positive associations. However, promoting a products on the basis of country of origin can be problematic where these claims could be constructed as 'racist'; or where there are laws against marketing campaigns based on the country of origin which might discriminate against other imports(Solomon etal, 2006).

2.1.2. Attitude Models

According to Schiffman and Kanuk (2000), psychologists have sought to construct models that capture the underlying dimensions of an attitude so that there is a better understanding of the relationship between attitudes and behaviour.

The following section examines the Tri-component attitude model and the multiattribute attitude model:

2.1.3. Tri-component Attitude Model

This model emphasizes the interrelationships between knowing, feeling and doing. Consumers' attitudes towards a product cannot be determined simply by identifying their beliefs about it (Solomon et al, 2006).

According to the tricomponent model, attitudes consist of three major components: a cognitive component, an affective component and a conative component. (Schiffman and Kanuk, 2000) Attitudes are important because they guide our thoughts (the cognitive function), influence our feelings (the affective function), and affect our behavior (the conative function) (Hoyer and MacInnis, 2008).

2.1.3.1 The Cognitive Component

The cognitive component is the knowledge and perception that are acquired by a combination of direct experience with the attitude object and related information from various sources. This knowledge and resulting perception commonly take the form of beliefs, that is, the consumer believes that the attitude object possesses various attributes and that specific behavior will lead to specific outcomes (Schiffman and Kanuk, 2000).

The cognitive component consists of a consumer's beliefs about an object. For most attitude objects, people have a number of beliefs. Feelings or emotional reactions to an object represent the affective component of an attitude. The behavioral component of an attitude is one's tendency to respond in a certain manner toward an object or activity (Hawkins and Mothersbaugh, 2010).

2.1.3.2 The Affective Component

A consumer's emotions or feelings about a particular product or brand constitute the affective component of an attitude. These emotions and feelings are frequently treated by consumer researchers as primarily evaluative in nature, that is, they capture an individual's direct or global assessment of the attitude object. Affect-laden experiences also manifest themselves as

emotionally charged states (such as happiness, sadness, shame, disgust, anger, distress, guilt or surprise). Research indicates that such emotional states may enhance or amplify positive or negative experiences and that later recollections of such experiences may impact what comes and how the individual acts (Schiffman and Kanuk, 2000).

In affective component of an attitude, the overall evaluation of the product may be simply a vague, general feeling developed without cognitive information or beliefs about the product, or it may be the result of several evaluations of the product's performance on each of several attributes. (Hawkins and Mothersbaugh, 2010) Beliefs about a brand are multi-dimensional because they represent the brand attributes consumers perceive. The affective component, however, is one-dimensional. Consumer's overall evaluation of a brand can be measured by rating the brand from 'poor' to 'excellent' or from 'prefer least' to 'prefer most' (Assael, 2001).

When affective involvement with an object or decision is high, consumers can experience fairly strong emotional reactions to or engagement with a stimulus. Engagement refers to the extent to which consumers are emotionally connected to a product or ad. A high level of engagement means strong feelings that can, in turn, influence attitudes. In this case the consumer's feelings act as a source of information, and consumers will rely on these feelings to evaluate the stimulus (Hoyer and MacInnis, 2008).

2.1.3.3 The Conative Component

Conation, the final component of the tricomponent attitude model, is concerned with the likelihood or tendency that an individual will undertake a specific action or behave in a particular way with regard to the attitude object. According to some interpretations, the conative component may include the actual behavior itself. In marketing and consumer research, the conative component is frequently treated as an expression of the consumer's intention to buy (Schiffman and Kanuk, 2000).

The conative dimension is the consumers tendency to toward an object, and this is generally measured in terms of intention to buy. Measuring buying intent is particularly important in developing marketing strategy. Beliefs and attitude about a chosen brand do not have to change for consumers to establish an intention to buy if the economic inducement is large enough (Assael, 2001).

2.1.4. Multi-Attribute Attitude Model

Multi-attribute attitude model have been extremely popular among marketing researchers. This type of model assumes that a consumer's attitude (evaluation) of an attitude object will depend on the beliefs he or she has about several or many attributes of the object. The use of a multi-attribute model implies that an attitude towards a product or brand can be predicted by identifying these specific beliefs and combining them to derive a measure of the consumer's overall attitude (Solomon et al, 2006).

The more positive beliefs associated with a brand, the more positive each belief is, and the easier it is for the individual to recall the beliefs, the more favorable the overall cognitive component is presumed to be. And because all the components of an attitude are generally consistent, the more favorable the overall attitude is. This logic underlies what is known as the multiattribute attitude model (Hawkins and Mothersbaugh, 2010).

Multiattribute attitude models portray consumers' attitudes with regard to an attitude object as a function of consumers' perception and assesment of the key attributes or beliefs held with regard to the particular attitude object. While there are many variations of this type of attitude model, those proposed by Martin Fishbein and his associates have stimulated the greatest amount of research interest. (Schiffman and Kanuk, 2000)

2.1.5. The Fishbein model

The most influential multi-attribute model is the Fishbein model, named after its primary developer (Solomon et al., 2006).

The model measures three components of attitude;

2.1.5.1 The Attitude-Toward-Object Model

The attitude-toward-object model is especially suitable for measuring attitudes toward a product or a service category or specific brands. According to this model, the consumer's attitude toward a product or a specific brand of a product is a function of the presence or absence and evaluation of a certain product-specific beliefs and/or attributes. In other words, consumers generally have favorable attitudes towards those brands that they believe have an adequate level of attributes that they evaluate as positive, and they have unfavorable attitudes toward those brands they feel do not have an adequate level of desired attributes or have too many negative attributes (Schiffman and Kanuk, 2000). It measures the salient beliefs people have about an attitude object (those beliefs about the object that are considered during evaluation) (Solomon et al., 2006).

2.1.5.2 The Attitude-Toward-Behavior Model

The focus of Fishbein's attitude-toward-behavior model is the individual's attitude toward behaving or acting with respect to an object, rather than the attitude toward the object itself (Schiffman and Kanuk, 2000). The model measures the object-attribute linkages, or the probability that a particular object has an important attribute. (Solomon et al., 2006) The appeal of this model is that it seems to correspond more closely to actual behavior than the attitude-toward-object model (Schiffman and Kanuk, 2000).

2.1.5.3 Theory-of-Reasoned-Action Model

The theory of reasoned action builds on other research conducted by Fishbein and his associates. It represents a comprehensive integration of attitude components into a structure that is designed to lead to both better explanation and better predictions of behavior. Like the basic

tricomponent attitude model, the Theory-of -reasoned-action model incorporates a cognitive component, an affective component and a conative component; however these are arranged in a pattern different from that of the tricomponent model(Schiffman and Kanuk, 2000).It measures the evaluation of each of the important attributes (Solomon et al, 2006).

Working backward from behavior (the act of purchasing of a particular product), the model suggests that the best predictor of behavior is the intention to act. Thus if consumer researchers were solely interested in predicting behavior, they would directly measure intention. However, if they were also interested in understanding the underlying factors that contribute to a consumer's intention to act in a particular situation, they would look behind intention and consider the factors that led to intention, that is the consumer's attitude toward behavior and the subjective norm(Schiffman and Kanuk, 2000).

2.2. Empirical Review

Both theories and empirical evidences reveal that consumers attitude toward the product influences customers preference. Insead et al. (1991) revealed that **consumers cognition** on the product influences customer purchase preference in addition to the product characteristics, location, and date of delivery of the product. These authors also revealed that USA, French and UK customers rate consumers level of awareness about the product features, attributes, and associated benefits influence their preference and purchase intentions. A study conducted by Hussien et al. (2016) showed that the utilitarian function of the product expected by consumers has a significant effect on behavioral intention of consumers in high involvement products.

According to the study done by Huh et al. (2016) advertising triggers three distinct but interrelated responses: cognitive effects (thinking), affective effects (feeling), and behavioral effects. Pharmaceutical advertising research has established that effect type and sequence of effects are subject to processing conditions, and the final outcome is preceded and mediated by a host of cognitive, affective, and other intervening factors. Although prescription drugs have been found to be more highly involving, OTC drugs also pertain directly to individual health and well-

being, have safety risks (e.g., side effects, misuse, and likely generate high-involvement information processing).

In the study of Mintzes et al. (2002) it was found that normative beliefs manifested in the forms of requests patients' for medicines are a powerful driver of prescribing decisions. In most cases physicians prescribed requested medicines but were often ambivalent about the choice of treatment. If physicians prescribe requested drugs despite personal reservations, sales may increase but appropriateness of prescribing may suffer. Concerns about the value of opening up the regulatory environment to permit direct to consumer advertising in the EU and Canada seem well justified.

On a study done in Northern state of Malaysia, it was found that with the global escalating healthcare cost, governments in many countries have adopted ongoing series of cost-containment attempts in an effort to spend their limited financial resources efficiently so that equitable access to healthcare can be provided. One of the many ways to control health care expenditure is to promote the use of cheaper generic drugs that maximize utilitarian value instead of the more expensive branded equivalents. Savings made by using generic medicines enhance the utilitarian function of pharmaceuticals and helps to mobilizes fund to finance other treatment modalities (Chua et al., 2009).

In a similar study done in Northern state of Malaysia, it was shown that a large proportion of Malaysia pharmaceutical market is dominated by multinational pharmaceutical companies (MNPC) with better product attributes maximizing the utilitarian value of customers. The local pharmaceutical companies dominate the manufacturing of generic, over-the-counter/supplement and traditional products and produce about 30% of the domestic demand. The rising healthcare cost is a strong driver of Malaysia's generic pharmaceutical industry. Thus, generic medicine offers an attractive alternative for cost-containment. The government of Malaysia is the major

purchaser of generic products owing to their product attributes and utilitarian function(Chua et al., 2009).

According to Babar et al. (2010), it is stated that though for economic reasons the use of generic substitution is increasingly being supported by health authorities, but it is often met with suspicion by health care providers and patients. Generics are often considered inferior medicines and this was the result of unwarranted normative belief and perceived poor compliance with good manufacturing practices (GMP), lack of patient's knowledge about generic medicines and the influence of multinational drug companies.

A study by Lodorfos et al. (2006) revealed that consumers' cognition through direct experience with the brand, price tolerance, brand trust and the subjective norm or opinions of others are important determinants of repeat purchase behavior of OTC pharmaceutical products. Price sensitivity had a significant effect on attitude to repurchase, which in turn affected intention to repeat purchase, whilst past experience with the brand is critical in determining trustworthiness beliefs, price sensitivity and purchase behavior (Lodorfos et al., 2006). According to Hoch's (2002) opinion, product experience credibly influences consumer behavior because a consumer's personal experience with a product subtly affects their beliefs and 'draws the consumer in'.

However, there is a different school of thought that believes that with experience of a product, the consumer becomes more knowledgeable as to its quality and value (Zeithaml, 1988) consequently when a consumer better understands the value of the product, they are more sensitive to changes in value (e.g. if the price were to increase), which may affect the intention to purchase (Chang and Wildt, 1994; Helsen and Schmittlein, 1994; Reicheld, 1996). In addition, customer commitment increases a customer's price tolerance (Aaker, 1996).

The **subjective norm** is intended to measure the social influences on a person's behavior i.e., family members expectations (Ha, 1998). Therefore including the **subjective norm** in measures of repeat purchase should lead to more accurate estimates of consumer repurchase behavior (Ha, 1998). Indeed the opinions of family and friends are reported to influence an individual's attitude, intentions and behavior (Ajzen and Fishbein, 1980).

An important aspect of this intention to purchase consumer goods is the attitude toward the product. In the process of forming beliefs about products, a person acquires an attitude. For example a study conducted by Pahud de Mortanges, Rietbroek & MacLean Johns (1997) revealed that consumers form beliefs that are linked to the attributes of the product. The attitude toward the product then becomes a function of a person's evaluation of the **product attributes**.

The evaluation of **product attributes**, such as price and quality, eventually shape the attitude toward purchasing a product. It is suggested that consumers have a low price sensitivity for OTC drugs and assign less weight in their evaluations to the price of an OTC drug. A possible reason for this is that consumers make quality inferences that are based on perceived price differences between brands, and because of brand loyalty (Akçura, Gonül & Petrova, 2004). Typically, well-known brands that are priced higher are regarded to be of a better quality in the consumer's eye. This positive relationship between perceived quality and price is found for various types of products. (Jharap, 2017)

In a similar study by Jharap (2017) it was shown that, the **perceived quality** may be different for consumers that have varying levels of product knowledge. As pointed out before, one way to acquire more product knowledge is to gain more experience with the products. The experience of a consumer may lead to more product knowledge and an updated belief about the product. It can be expected that as consumers gain more experience, they also become more knowledgeable about different types of products and brands within a product category. For consumers, who have little experience with the OTC drug category, this could imply that their lower level of

knowledge might limit their ability to differentiate between products. For example, consumers that have little experience with a specific OTC drug category may solely rely on the little prior knowledge they have, such as brands that they might recognize from a commercial.

To the contrary, consumers with more experience may have a better ability to differentiate between brand alternatives and consequentially might develop a more positive attitude toward brand products that are less advertised, such as generic OTC drugs. The perceived quality of generic OTC drugs might be more accurate as their beliefs have developed. Nonetheless, it is possible that the beliefs a consumer has about brand alternatives within the product category might not be 'updated'. Their beliefs about the various products within the product category might not be updated to beliefs that result in a more accurate representation. The consumer can be overconfident in the own ability to assess the quality of different brands of OTC drugs and thinks he/she gained sufficient experience with the products to come to an informed decision. These consumers are not motivated to obtain [knowledge about brand alternatives](#) by information search or information processing(Jharap, 2017).

Turek et al. (2014) showed that, getting satisfaction is directly related to personal factors and often subjective. Undoubtedly, health is one of the needs bringing the highest level of dissatisfaction. Therefore, the increase in spending on OTC medications in Poland may be due to the growing needs of the broadly understood notion of health and also come as the result of aging of the Polish population. However, it should be emphasized that lifestyle belongs to the important factors equally creating the needs on the OTC medications market. Nevertheless, the health needs are amplified by completely external factors. Easy access to medicinal products in Poland is certainly one of the factors determining the consumption level (Turek, 2014).

Diseases, ailments and often subjective feelings directly affect the consumption of medications and consumer behavior (Smith et al., 2009). Pain is one of them. According to the studies performed in the United States, in case of about one-third of people pain was “disabling” and had a great influence on daily life functions (Portenoy et al., 2004).

In a study done in Poland about the determinants of consumption behavior of painkillers and anti-inflammatory drugs, it was shown that the role of **compliance** through consultation with the doctor or pharmacist and reading the medication leaflet contents if the medication is used for the first time is important in health care systems. Good communication on this line makes it possible to maximize the benefits of OTC painkillers usage and minimize the potential side effects. Adequate knowledge about the consumption of OTC painkillers and OTC anti-inflammatory medications may influence the views on the possibility of the harmfulness of OTC painkillers and OTC anti-inflammatory medications and concomitant use of gastrointestinal drugs with OTC painkillers and OTC anti inflammatory medications(Turek etal. 2014).

2.3. Conceptual Framework

There are several different variables that have been found to have a certain effect the consumers' attitudes of the purchase intentions of imported pharmaceuticals. Based on the review from previous literature and relevant articles, this part summarizes and discusses the influence of these variables on the purchase intentions of consumers in the Ethiopian environment. Besides, based on the review of each concept, the relevant hypotheses will be presented. The conceptual framework of the study has been presented below;

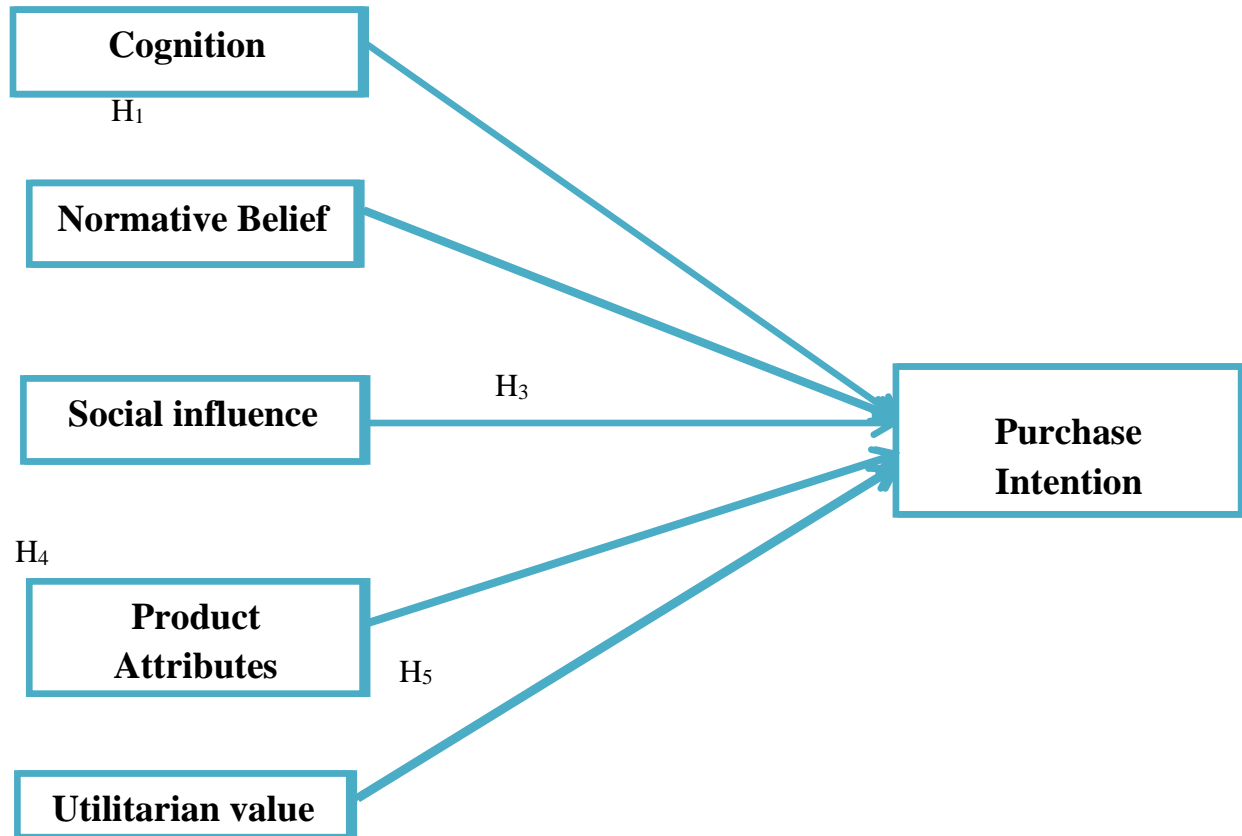


Figure 2.1: Attitude factors that influence consumers purchase intentions

Source: Adapted from Schiffman and Kanuk (2000)

2.3.1 Consumers cognition

Cognition status encompasses the notion of consumer awareness, interest level, or buyer readiness. Marketers have to determine whether potential consumers are aware of the product, interested in the product, or need to be informed about the product (Schiffman and Kanuk, 2000). Perception is a process that begins with consumer exposure and attention to marketing stimuli and ends with consumer interpretation. Reality and consumers perception of that reality are often quite different (Hawkins and Mothersbaugh, 2010).

When we speak of the formation of an attitude, we refer to the shift from having no attitude toward a given object (eg. A notebook computer) to having some attitude toward it (eg. A

notebook computer is useful when traveling). The shift from no attitude to an attitude (i.e. the attitude formation) is the result of learning (Schiffman and Kanuk, 2000).

Consumers will generally accept favorable information about brands in the inert set, although they do not seek out such information. Brands in this set are generally acceptable when preferred brands are not available. Internal information is the primary source used by most consumers most of the time. However, note that information in long-term memory was initially obtained from external sources. Thus, a consumer may resolve a consumption problem using only or mainly stored information. At some point, however, the individual acquired that information from an external source, such as direct product experience, friends, or low-involvement learning. (Hawkins and Mothersbaugh, 2010).

According to Hawkins and Mothersbaugh (2010), consumers' expectations are the result of learning and can be formed very quickly, as the old saying "first impression matter" suggests. Once established, these expectations can yield enormous influence and can be hard to change. Many consumers expect, for example, that well-known brands are higher quality. As a consequence, consumers frequently evaluate the performance of a well-known brand as a higher than that of an identical product with an unknown brand name.

Consumers may actually switch to less-preferred options for a variety's sake even though they enjoy the more familiar option more. On the other hand, when the decision situation is ambiguous or when there is little information about competing brands, consumers tend to opt for the safe choice by selecting familiar brands and maintaining the status quo (Solomon et al, 2006).

When product information is incomplete, judgments are often derived from beliefs about co-variation, or perceived associations among events that may or may not actually influence one another. For example, a consumer may form an association between product quality and the length of time a manufacturer has been in business. Other signals or attributes believed to co-exist with good or bad products include well-known brand names, country of origin, price and retail outlets that carry the product (Solomon et al, 2006).

Therefore, based on the arguments stated above, the first hypothesis is constructed as follows:

H₁: Consumers' cognition of imported pharmaceuticals has a positive and significant effect on consumers purchase intention.

2.3.2 Normative Beliefs (Expert Opinion)

Some groups and individuals exert a greater influence than others and affect a broader range of consumption decisions. This type of influence is normative influence- that is, the reference group helps to set and enforce fundamental standards of conduct(Solomon et al, 2006).

Stock outs, the store being temporarily out of a particular brand, obviously affect a consumer's purchase decision. The consumer then must decide whether to buy the same brand but at another store, switch brands, delay the purchase and buy the desired brand later at the same store, or forgo the purchase altogether. In addition, the consumer's verbal behaviors and attitudes may change(Hawkins and Mothersbaugh, 2010).

Three types of perceived costs affect the likely response of a consumer to stock out. Substitution costs refer to the reduction in satisfaction the consumer believes a replacement size, brand, or product will provide. This is a function of the consumer's commitment or loyalty to the preferred brand and the perceived similarities of potential substitutes. Transaction costs refer to the mental, physical, time, and financial costs of purchasing a substitute product or brand. Opportunity costs are the reduction in satisfaction associated with forgoing or reducing consumption off the product. How these costs will be perceived and thus which of the outcomes, or combinations of outcomes will occur depends on the particular consumer, product and situation(Hawkins and Mothersbaugh, 2010). Therefore, H₂will be:

H₂: Consumers' attitude towards expert opinions of imported pharmaceuticals has a positive and significant effect on purchase intention.

2.3.3 Social influence

Strength of social tie refers to the closeness and intimacy of the group linkages. Primary groups, such as family and friends, involve strong ties and frequent interaction. Primary groups often wield considerable influence. Secondary groups, such as professional and neighborhood associations, involve weaker ties and less frequent interaction. Type of contact refers to whether the interaction is direct or indirect. Direct contact involves face-to-face interaction, indirect contact does not (Hawkins and Mothersbaugh, 2010).

As a member of a large society, people share certain cultural values or strongly held beliefs about the way the world should be structured. Other values are shared by members of subcultures, or smaller groups within the culture, such as ethnic groups, teens, people from certain parts of the country (Solomon et al, 2006).

Just as the bases for social power can vary, so the process of social influence operates in several ways. Sometimes a person is motivated to model the behavior of others because this mimicry is believed to yield rewards such as social approval or money. At other times, the social influence process occurs simply because the person does not know the correct way to respond and is using the behavior of the other person or group as a cue to ensure that he or she is responding correctly. Normative social influence occurs when a person conforms to meet the expectations of a person or group. In contrast, informational social influence refers to conformity that occurs because the group's behavior is taken as evidence of reality: if other people respond in a certain way in an ambiguous situation, we may mimic their behavior because this appears to be the correct thing to do (Solomon et al, 2006).

A consumption-based group, often termed a consumption subculture, is a distinctive subgroup of society that self-selects on the basis of a shared commitment to a particular product class, brand, or consumption activity. These groups have an identifiable, hierarchical social structure; a set of shared beliefs or values; and unique jargon, rituals, and modes of symbolic expression. Thus,

they are reference groups for their members as well as those who aspire to join or avoid them.(Hawkins and Mothersbaugh, 2010)Participating in a shared consumption experience is a means of developing and maintaining social relationships among individuals. (Hawkins and Mothersbaugh, 2010).

Despite the abundance of formal means of communication (such as newspapers, magazines and television), much information about the world is conveyed by individuals on an informal basis. Information obtained from those we know or talk to directly tends to be more reliable and trustworthy than that received through more formal channels and, unlike advertising, it is often backed up by social pressure to conform to these recommendations. Another factor in the importance of word of mouth (WOM) is the decline in people's faith in institutions. The influence of others' opinions is at times even more powerful than one's own perceptions. (Solomon et al, 2006) Most WOM campaigns happen spontaneously, as a product begins to develop a regional or a sub-cultural following, but occasionally a 'buzz' is created intentionally (Solomon et al, 2006). Therefore, H₃ is constructed as follows:

H₃:Consumers' Social influence has a positive and significant effect on consumers purchase intention of imported pharmaceuticals.

2.3.4 Product attributes

Attribute-based choice requires the knowledge of specific attributes at the time the choice is made, and it involves attribute-by-attribute comparisons across brands. Attribute-based choices require the comparison of each specific attribute across all the brands considered. This is a much more effortful and time-consuming process than the global comparisons made when attitude-based choice is involved. It also tends to produce a more nearly optimal choice(Hawkins and Mothersbaugh, 2010).

Country of Origin (COO), in which consumers interpret products more positively when they are manufactured in a country where they perceive positively, as well as brand effects, where well-known brands are perceived as higher quality as unknown brands. In general, quality signals

operate when consumers lack the expertise to make informed judgments on their own, when consumer motivation or interest in the decision is low, and when other quality-related information is lacking (Hawkins and Mothersbaugh, 2010).

When data about an attribute are missing, consumers may assign it a value based on a presumed relationship between that attribute and one for which data are available; they may assign it the average of their assessment of the available attributes; they may assume it to be weaker than the attributes for which data are supplied; or any of a large number of other strategies may be used (Hawkins and Mothersbaugh, 2010).

Consumers frequently use an observable attribute of a product to indicate the performance of the product on a less observable attribute. An attribute used to stand for or indicate another attribute is known as a surrogate indicator. Consumers often use such factors as price and country of origin as surrogate indicators of quality, known as quality signals (Hawkins and Mothersbaugh, 2010).

In general, surrogate indicators operate more strongly when consumers lack the expertise to make informed judgments on their own, when consumer motivation or interest in the decision is low, and when other quality-related information is lacking. Obviously, when consumers rely on surrogates that have little relationship to actual quality, they are likely to make sub-optimal decisions (Hawkins and Mothersbaugh, 2010). Therefore, H₄ is formulated as follows:

H₄: Consumers' attitude towards product attributes of imported pharmaceuticals has a positive and significant effect on their purchase intention.

2.3.5 Utilitarian value

The utilitarian function is related to the basic principles of reward and punishment. We develop some of our attitudes towards products simply on the basis of whether these products provide pleasure or pain (Solomon et al, 2006). Utilitarian appeals involve informing the consumer of one or more functional benefits that are important to the target market. Which is best under what conditions? Value-expressive appeals attempt to build a personality for the product or create an

image of the product user. Both theory and some empirical evidence indicate that *utilitarian* appeals are most effective for functional products and *value-expressive* appeals are most effective for products designed to enhance self-image or provide other intangible benefits. Thus, marketers generally should not use image (value-expressive) advertising for lawn fertilizers or factual (utilitarian) advertising for perfumes. However, many products, such as automobiles, some cosmetics, and clothes, serve both utilitarian and value-expressive purposes (Hawkins and Mothersbaugh, 2010). Therefore, H₅ is formulated as follows:

H₅: Consumers' utilitarian value has a positive and significant effect on consumers purchase intention of imported pharmaceuticals.

CHAPTER 3 RESEARCH METHODOLOGY

3.1. Research Approach

According to Neuman (2007), a business research is classified into quantitative and qualitative approaches. Qualitative research is defined as a research strategy with the purpose of gaining a deep understanding of the phenomena. In specific, qualitative research provides the insights into the problem and attempts to offer ideas. (Trochim, 2003). Quantitative research entails a deductive approach and can be seen as a strategy that emphasizes quantification in gathering and analyzing of data. It allows the researcher to collect numerical data, from large sample sizes, then to be measured in a statistical manner. (Neuman, 2007)

The study is intended to investigate the effect of consumers' attitude on their purchase intentions using tricomponent and multi-attribute attitude models. Therefore, the research approach is deductive in nature which tried to test the credibility of the stated attitude models in the context of the pharmaceutical sector in Ethiopia. The deductive nature of the study makes quantitative research approach appropriate for this research. Besides, the study tested six hypotheses which have been formulated based on the stated theories. Thus, in this study, quantitative approach was used.

3.2. Research Design

According to Neuman, (2007), Exploratory research design is to observe what is in existence already. It is applied when phenomenon is not broadly studied before and needed to be explored from a new insight. The design of the study requires the researchers to be flexible in order to ensure various facets to be observed. Descriptive research design aims at formulating an understanding of situations, individuals or events. It provides a detailed information of an event or situation that is studied despite of quantitative, qualitative or a combination of methods. Explanatory research design is to seek for an explanation for a certain issue by identifying the relationship among the variables. (Neuman, 2007)

The research design used in this study is explanatory in nature. Explanatory research design was used to analyze the effect of the attitude that consumers' have towards imported pharmaceuticals

on their purchase intentions. Moreover, the study was used to have a clear insight about consumers' attitudes towards imported pharmaceuticals in Ethiopia.

3.3. Data Types and Sources

Primary data was collected through questionnaire. A cross sectional survey method was used to collect the opinion of respondents regarding their attitude towards imported pharmaceuticals. The survey instrument captured questionnaire items that would be valid to measure the variables of the study. Secondary data was also used in the study which was obtained from journal articles, publications by Ethiopian Pharmaceuticals Association, Food Medicine, Health care Authority, Publications by Ministry of Health, and books.

3.4. Population of the Study

3.4.1 Population

The target population for this study were patients and pharmacists in Addis Ababa.

3.4.2 Sampling Technique

Multistage sampling technique was used. According to FMHACA, there are a total of 600 pharmacies in Addis Ababa. Out of these 600 pharmacies, 30 were randomly selected using random table. As stated above, the target population of the study were patients and pharmacists. Unfortunately, there is no a dependable data based regarding the actual patients and pharmacists in Ethiopia. Any of the probability sampling methods such as simple random sampling, systematic sampling and cluster or stratified sampling could not be used, since the sample frame or the list of patients and pharmacists could not be readily made available during the data collection period. Therefore, due to the absence of sample frame of patients and pharmacists, use of any of the probability sampling methods was found to be impractical. Therefore, patients and pharmacists will be selected using convenience sampling method.

3.6 Sample Size

In this study, Convenience sampling method was used and thus, 360 patients (which happen to be in the pharmacy at a given convenient time) were approached from the 30 pharmacies to fill out the questionnaires. And 24 pharmacists were selected from the 30 pharmacies so that the sample size was 384. The sample size determination is shown below.

According to Neuman (2007), since the population of the study was infinite, the following formula was used:

$$n = \frac{Z^2 (PF)}{e^2}$$

Where, n : Sample size

Z : Measure of Confidence Level which is 95% so that Z will be 1.96

P : 0.50 Probability will be used

F: 1-P which will be 0.50

e : 0.05 preciscion level will be used

Therefore, $n = \frac{1.96^2 (0.5 \times 0.5)}{(0.05)^2} = \underline{\underline{384.16}}$

3.7 Methods of data collection

In this study, questionnaire was the method used to collect the first hand data in order to fulfill the goal since it was the most effective way to reach the respondents within a limited time and costs. This data collection method was inspired by previous studies in the same area, that investigated factors influence toward consumer attitude. The advantage of using a questionnaire to collect data is to lay the foundation for generalizing the result, since the the purpose of this study is to investigate the relationship between different variables.

3.8 Methods of Data Analysis

Both descriptive and inferential statistical methods were used in this study in order to describe consumers' attitude towards the imported pharmaceuticals. Descriptive statistical methods such as mean and graphs were used to summarize demographic data and the key variables of the study. Inferential statistics was used to explain the relationship between consumers' attitudes and their purchase intentions. Pearson co-relation analysis was used to test the direction and strength of the relationship between consumers' attitudes and their purchase intentions. Besides, multiple regression analysis was used to test the six hypothesis related to the relationship between the variables of the study.

3.9 Validity and Reliability of the Study

In order to ensure the content validity, a standard instrument was used. To ensure the construct validity, important concepts related to the study were addressed. In addition, the opinion of experts in the sector was taken to ensure that the survey instrument is valid enough to measure the variables of the study.

According to Neuman (2007), reliability examines the consistency of a concept measure. A concept can be measured by multiple items and questions are formulated on the light of measurements which will be added up to gauge an overall score. In this way the most important issue is to ensure these indicators refer to the same thing. Internal reliability refers to the consistency between two indicators, in which the score of respondents on one indicator is related to their score on the other. It can be examined by Cronbach's alpha. If the value is greater than or equal to 0.70, it implies an accepted level of internal consistency. The great the value, the better the consistency of the question formulated (Neuman, 2007).

In order to ensure the reliability of the study, Cronbach's alpha value was computed. According to Neuman (2007), the variables of the study will be used for analysis if they are found reliable, provided that their Cronbach's alpha value is greater or equal to 0.70.

CHAPTER 4 DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter deals with data presentation, data cleaning processes needed to prepare the dataset for statistical analysis, test of statistical assumptions, descriptive statistical analysis and inferential statistical analysis. The chapter addresses the necessary steps taken to test the 5 hypotheses using multiple regression method.

4.2 Data Screening and Cleaning

A self administered survey was used to collect data from patients or consumers of pharmaceuticals and pharmacists in Addis Ababa. Since the survey was self administered, the participants were requested to return the questionnaire within two weeks time. 384 questionnaires were distributed and 296 were returned. All the collected questionnaires were checked to confirm that all the items were responded by the participants. However, only 223 questionnaires were found to be completely filled as per the instruction and found to be usable for analysis.

All the data values were accounted and all the necessary precautions were taken to make sure that the research participants filled in all the items in the questionnaire. Once the questionnaires were collected through self administered survey, the data were entered in to SPSS. The quality of the data entered in to SPSS was critically examined to make it ready for statistical analysis. The dataset was rechecked to ensure the accuracy of the data entry. The minimum and maximum data values on each variable related to each case were checked to detect any irregular or unusual data values.

The data cleaning process was carried out to ensure the accuracy and appropriateness of the numerical codes related to each variable and case. In the data cleaning process, it was ensured

that each variable had code values that range from 1 to 5 in line with the scales used in the questionnaire. With this regard a frequency table was used as a convenient way to summarize the minimum and maximum values for each variable related to the 223 cases. The authenticity of the dataset has been ensured by correcting unusually high data values related to the specific variable and case after making reference to the original questionnaire.

4.3 Reliability Test

According to Cooper and Schindler (2003, p. 236), “a measure is reliable to the extent that it supplies consistent results”. From a measurement perspective, reliability is defined as the degree to which the measures are free from error so that the consistency of the results is assured (Fuchs and Diamantopoulos, 2009). Similarly, Leary (2014, p.67) provided a concise definition of reliability as “the consistency or dependability of a measuring technique”. Generally, it is believed that reliability tests help to evaluate the quality of the data.

In this study, Cronbach alpha coefficient was used to examine the internal consistency of the items. According to Nunnally (1978) and Churchill (1979), the measurement scale would be considered as reliable if the Cronbach alpha is 0.70 or higher. In order to ensure the reliability of the measurement instrument, a pilot test was conducted among 10 pharmacies. Based on the feedback of the pilot test, the necessary corrections were made on the content of the items, wording of the items, and instructions to further improve the reliability of the measures.

The reliability test revealed that, the Cronbach’s alpha of each independent and dependent variable was adequate with a score of 0.70 or above. Besides, the overall reliability of all the 34 items was found to be 0.919 indicating a good level of internal consistency among the measurement items used in the study. The reliability test summary is presented below in Table 4.1.

Table 4.1 Reliability test summary

| Variable name | Chronbach's alpha value | Number of items |
|-------------------------------|-------------------------|-----------------|
| Cognition | 0.773 | 6 |
| Normative belief | 0.719 | 5 |
| Social influence | 0.725 | 5 |
| Product attributes | 0.817 | 5 |
| Utilitarian value | 0.842 | 5 |
| Purchase intentions | 0.792 | 8 |
| Composite/overall reliability | 0.919 | 34 |

Source: Own survey (2018)

4.4 Descriptive Analysis

This section presents the descriptive statistical summary of the measurement items, the independent variables, the dependent variables, and description of the results.

4.4.1 Demography of the Respondents

This part addresses the demographic profiles of the respondents in terms of their age, gender, marital status, religion, education, occupation, and income. As presented in Table 4.2, the age composition of the respondents covers a wide range of the section of the population.

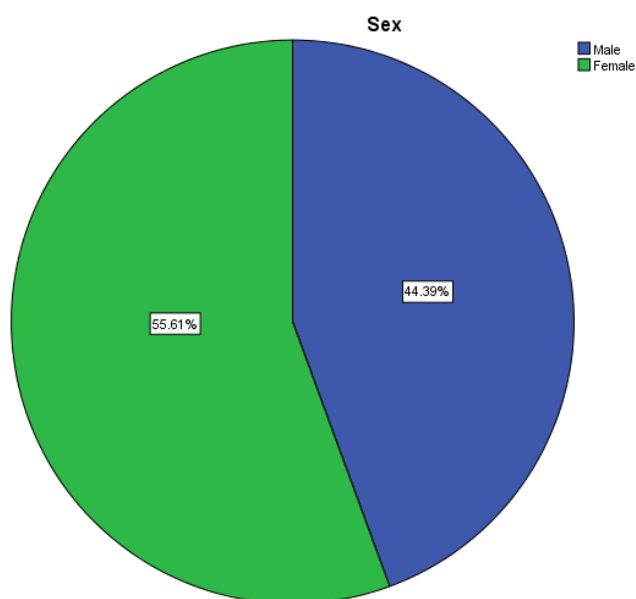
Table 4:2 Age composition of respondents

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------|-----------|---------|---------------|--------------------|
| <21 | 13 | 5.8 | 5.8 | 5.8 |
| 21-35 | 119 | 53.4 | 53.4 | 59.2 |
| Valid 36-50 | 72 | 32.3 | 32.3 | 91.5 |
| >50 | 19 | 8.5 | 8.5 | 100.0 |
| Total | 223 | 100.0 | 100.0 | |

Source: Own survey (2018)

As presented above in Table 4.3, 5.8% of the respondents are lower than age 21 and 8.5% of the respondents are above 50 years. About 89% of the respondents fall between 21 – 50 years old. This indicates that purchase of pharmaceuticals is largely the responsibility of the most active section of the society. This group of the society bears the burden of taking responsibility high involvement purchases which are relevant to the family. However, this does not imply that the stated age group is the largest user of pharmaceutical products in Ethiopia.

The respondents' gender mix is presented below in Figure 4.1.



Source: Own survey (2018)

As indicated in Figure 4.1, 55.6% of the respondents are female and 44.4% of the respondents are male. This is a clear indication that in a traditional society like Ethiopia where a large and extended group of family live together, the responsibility of taking care of the family appeared to be the responsibility of females.

Table 4.3 below presents the religion mix of the respondents.

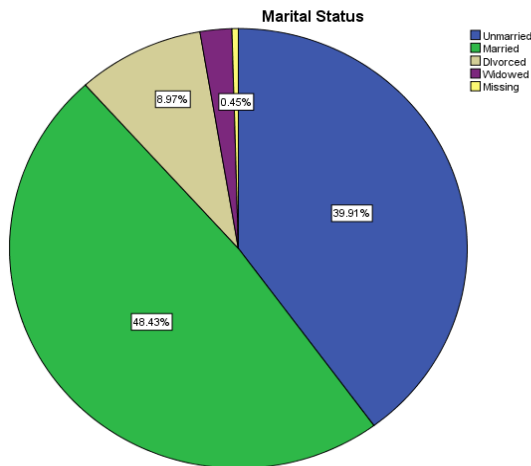
Table 4.3 Religion mix of respondents

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Orthodox | 161 | 72.2 | 72.5 | 72.5 |
| Catholic | 10 | 4.5 | 4.5 | 77.0 |
| Protestant | 27 | 12.1 | 12.2 | 89.2 |
| Muslim | 18 | 8.1 | 8.1 | 97.3 |
| Others | 6 | 2.7 | 2.7 | 100.0 |
| Total | 222 | 99.6 | 100.0 | |
| Missing System | 1 | .4 | | |
| Total | 223 | 100.0 | | |

Source: Own survey (2018)

As indicated in the table above, 72.2% of the respondents are Orthodox Christians, 4.5% of the respondents are Catholics, 12.1% of the respondents are Protestants, and 8.1% of the respondents are Muslims. The distribution of the respondents in terms of religion is only a random outcome which requires additional evidence to draw any inference.

The marital status of the respondents is presented in Figure 4.2 below.



Source: Own survey (2018)

As shown in Figure 4.2 above, 48.4% of the respondents are married, 39.9 % are unmarried and 8.9% are widowed. This distribution appeared to be a logical extension of the marital status of the country.

The education level of respondents is presented below in Table 4.4.

Table 4:4: Education level of respondents

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|---------------------------|---------|---------------|--------------------|
| | Illiterate | 3 | 1.3 | 1.4 |
| | Literate | 6 | 2.7 | 4.1 |
| Valid | Primary school Complete | 19 | 8.5 | 8.7 |
| | Secondary School Complete | 14 | 6.3 | 19.2 |
| | University graduate | 177 | 79.4 | 80.8 |
| | Total | 219 | 98.2 | 100.0 |
| Missing | System | 4 | 1.8 | |
| Total | | 223 | 100.0 | |

Source: Own survey (2018)

As presented above in Table 4.4 above, most of the respondents are university graduates indicating that purchase of a high involvement purchase of pharmaceuticals is handled by educated people.

The income distribution of respondents is also presented below in Table 4.5.

Table 4.5: Monthly income of respondents

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------|-----------|---------|---------------|--------------------|
| <1001 | 20 | 9.0 | 9.1 | 9.1 |
| 1001-2000 | 17 | 7.6 | 7.7 | 16.8 |
| 2001-3500 | 22 | 9.9 | 10.0 | 26.8 |
| Valid 3501-5000 | 33 | 14.8 | 15.0 | 41.8 |
| 5001-10000 | 90 | 40.4 | 40.9 | 82.7 |
| >10000 | 38 | 17.0 | 17.3 | 100.0 |
| Total | 220 | 98.7 | 100.0 | |
| Missing System | 3 | 1.3 | | |
| Total | 223 | 100.0 | | |

Source: Own survey (2018)

As indicated in Table 4.5 above, the income level of 57% of purchasers of imported pharmaceuticals is greater than 5000 Birr and the income level of 16.8% of the respondents is lower than 2000 Birr. This indicates the purchase intention of imported pharmaceuticals is affected by the income level of patients. However, further inference or conclusion would be drawn using inferential statistics which will be presented in last section of this chapter.

4.4.2 Descriptive Analysis of the Variables of the Study

4.4.2.1 Descriptive Analysis of Cognition of Consumers

The mean score, standard error, and standard deviation of the 6 question items captured under consumers cognition about imported pharmaceuticals is presented below in Table 4.6.

Table 4.6: Descriptive statistics of consumers cognition

| | N | Mean | | Std. Deviation |
|--|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Std. Error | Statistic |
| Cog 1 Imported pharmaceuticals have good quality | 223 | 3.8206 | .07451 | 1.11263 |
| Cog 2 Imported pharmaceuticals are good value for money | 222 | 3.3423 | .07081 | 1.05501 |
| Cog 3 Need to know about the country of origin of imported pharmaceuticals | 222 | 4.0450 | .07132 | 1.06263 |
| Cog 4 Imported pharmaceuticals are authentic | 221 | 3.2081 | .06733 | 1.00097 |
| Cog 5 Imported pharmaceuticals risk level is less as compared to local pharmaceuticals | 223 | 3.2870 | .06811 | 1.01704 |
| Cog 6 Imported pharmaceuticals provide adequate information to users | 223 | 3.4574 | .07011 | 1.04697 |
| Valid N (listwise) | 219 | | | |

Source: Survey result, 2018

This section describes the level of information, knowledge, and belief of consumers regarding imported pharmaceuticals. Consumers' cognition is related to the knowledge and perceptions that are acquired by a combination of direct experience with the attitude object and related information from various sources. This knowledge and resulting perceptions commonly take the form of beliefs, that is, the consumer believes that the attitude object possesses various attributes and that specific behavior will lead to specific outcomes (Schiffman and Kanuk, 2000).

As presented above in Table 4.6, the mean score of all the 6 questionnaire items are found to be greater than 3. This is an indication that consumers of imported pharmaceuticals in Ethiopia have adequate level of cognition before they make buying decision. Consumers believe that imported pharmaceuticals have good quality and their price is good value for money. Besides, consumers are also cognizant of the importance of the country of origin of the imported pharmaceuticals for their buying decisions. Related to the quality of imported pharmaceuticals, consumers in Ethiopia believe that the risk level of imported pharmaceuticals is less as compared to the risk level of compared to local pharmaceuticals. Finally, the descriptive statistics of consumers' cognition indicates that imported pharmaceuticals provide adequate information to users.

4.4.2.2 Descriptive Analysis of Normative Beliefs of Consumers

The mean score, standard error, and standard deviation of the question items captured under consumers normative beliefs about imported pharmaceuticals is presented below in Table 4.7.

Table 4.7: Descriptive Statistics of normative belief

| | N | Mean | | Std. Deviation |
|--|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Std. Error | Statistic |
| NB 1 Imported pharmaceuticals have better efficacy | 222 | 3.5631 | .06766 | 1.00815 |
| NB 2 Imported pharmaceuticals are overpriced in light of their effectiveness | 222 | 2.6757 | .07204 | 1.07343 |
| NB 4 Imported pharmaceuticals recommended by a medical doctor | 223 | 3.4843 | .06871 | 1.02600 |
| NB 5 Imported pharmaceuticals serve ego defensive function | 223 | 2.2915 | .08040 | 1.20070 |
| Valid N (listwise) | 217 | | | |

Source: Survey result, 2018

According to Schiffman and Kanuk (2000) the consumer's attitude toward behavior can be directly measured as a norm or affect often expressed in terms of overall favorability toward the purchase. In this study the normative belief of the consumer refers to the consumer's judgment about imported pharmaceuticals which would eventually influence their purchase intentions. As presented in Table 4.8 above, the mean score of two of the questionnaire items is greater than 3 and the mean score of two of the items is lower than 3. Consumers in Ethiopia believe that imported pharmaceuticals have better efficacy and they are willing to buy them as long as they are recommended by a medical doctor. However, respondents do not subscribe in to the idea that imported pharmaceuticals are overpriced in light of their effectiveness and they do not believe that they serve ego function.

4.4.2.3 Descriptive Analysis of Social Influence

The mean score, standard error, and standard deviation of the 5 question items captured under social influence related to purchase of imported pharmaceuticals is presented below in Table 4.8. This section addresses the extent to which individual consumers are motivated to comply with

advise, suggestions, and instructions provided by their medical doctors, pharmacists, friends, and family members.

Table 4.8: Descriptive statistics of social influence

| | N | Mean | | Std. Deviation |
|--|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Std. Error | Statistic |
| SI 1 Seek for family and friends opinion | 223 | 2.9596 | .07662 | 1.14419 |
| SI 2 Seek for pharmacist opinion | 223 | 3.7534 | .06808 | 1.01661 |
| SI 3 Compliance with medical doctor's recommendation | 223 | 3.7982 | .06874 | 1.02649 |
| SI 4 Compliance with pharmacist recommendation | 223 | 3.7892 | .06683 | .99796 |
| Valid N (listwise) | 222 | | | |

Source: Survey result, 2018

As presented above in Table 4.8, the mean score of one of the questionnaire items was lower than 3 and the mean score of rest of the items was found to be greater than 3. The descriptive statistics indicated that consumers in Ethiopia do not as such look for the opinion of their family members and friends. This clearly indicates that the purchase of pharmaceutical products is a high involvement purchase that requires professionals’ advice and guidance. On the other hand the result revealed that consumers in Ethiopia seek for medical doctors and pharmacists opinion before they make a buying decision of imported pharmaceuticals. Likewise, the result showed that consumers comply with the opinion and suggestions provided by medical doctors and pharmacists.

4.4.2.4 Descriptive Analysis of Product Attributes

The mean score, standard error, and standard deviation of the 5 question items captured under product attributes related to purchase of imported pharmaceuticals is presented below in Table 4.9.

Table 4.9: Descriptive statistics of social influence

| | N | Mean | | Std. Deviation |
|--|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Std. Error | Statistic |
| PA 1 Imported pharmaceuticals are effective | 223 | 3.4395 | .06527 | .97476 |
| PA 2 Imported pharmaceuticals fulfill national and international quality standards | 223 | 3.3946 | .06280 | .93788 |
| PA 3 Imported pharmaceuticals are well packaged | 223 | 3.6054 | .06408 | .95689 |
| PA 4 Imported pharmaceuticals are safe | 223 | 3.3049 | .06312 | .94264 |
| PA 5 Imported pharmaceuticals provide clear usage instructions | 223 | 3.6637 | .06352 | .94863 |
| Valid N (listwise) | 223 | | | |

Source: Survey result, 2018

This part addresses the extent to which imported pharmaceuticals possess the necessary attributes that the product should have to the satisfaction of the consumer. According to Schiffman and Kanuk (2000), attitude toward product attributes is an extension of the attitude-toward-object model. According to this model, the consumer's attitude toward a product or specific brands of a product is function of the presence (or absence) and evaluation of certain product-specific beliefs and/or attributes. As shown in Table 4.8 above, the mean score of all items is greater than 3.00 indicating that Ethiopian consumers are satisfied with the product attributes of imported pharmaceuticals. Consumers believe that imported pharmaceuticals are effective as they satisfy national and international quality standards. Consumers also believe that imported pharmaceutical are well packaged and they are safe for use. Finally, consumers indicate that imported pharmaceuticals provide clear usage instructions.

4.4.2.5 Descriptive Analysis of Utilitarian Value

The mean score, standard error, and standard deviation of the six question items captured under utilitarian value of imported pharmaceuticals is presented below in Table 4.10.

Table 4.10: Descriptive statistics of utilitarian value

| | N | Mean | | Std. Deviation |
|---|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Std. Error | Statistic |
| UV 1 Imported pharmaceuticals help patients to restore the health condition | 223 | 3.5067 | .06871 | 1.02610 |
| UV 3 Imported pharmaceuticals help patients to regain their confidence | 223 | 3.0897 | .07138 | 1.06586 |
| UV 4 Imported pharmaceuticals help patients to avoid stigmatization | 223 | 3.0045 | .07205 | 1.07594 |
| UV 5 Imported pharmaceuticals help patients to gain social acceptance | 223 | 2.9955 | .07534 | 1.12505 |
| UV 6 Imported pharmaceuticals help patients to boost their self concept | 223 | 3.0090 | .07520 | 1.12302 |
| Valid N (listwise) | 223 | | | |

Source: Survey result, 2018

As depicted in Table 4.10 above, the mean score of all measurement items was found to be greater 3 except one item. Consumers generally believe that imported pharmaceuticals help patients to restore their health conditions and eventually gain their self confidence so that patients can avoid the social risk of being exposed to stigmatization. However, consumers do not believe that use of imported pharmaceuticals do not necessarily help patients to gain social acceptance. Finally, the descriptive statistics indicate that use of imported pharmaceuticals help patients to boost their self concept.

4.4.2.6 Descriptive Analysis of Purchase Intentions

The mean score, standard error, and standard deviation of the eight question items captured under utilitarian value of imported pharmaceuticals is presented below in Table 4.11.

Table 4.11: Descriptive statistics of purchase intentions

| | N | Mean | | Std. Deviation |
|--|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Std. Error | Statistic |
| PI 1 Customers would like to buy imported pharmaceuticals for their effectiveness | 223 | 3.4439 | .06498 | .97039 |
| PI 2 Customers would like to buy imported pharmaceuticals for their timely response | 223 | 3.2870 | .06691 | .99917 |
| PI 3 Customers would like to buy imported pharmaceuticals for their less side effect | 223 | 2.9821 | .05503 | .82180 |
| PI 4 Customers would like to buy imported pharmaceuticals for their quality approval by FMHACA | 223 | 3.3498 | .05139 | .76734 |
| PI 5 Customers would like to buy imported pharmaceuticals for their previous effectiveness | 223 | 3.5964 | .05715 | .85339 |
| PI 6 Customers would like to buy imported pharmaceuticals for their affordability | 223 | 2.9058 | .06560 | .97957 |
| PI 7 Customers would like to buy imported pharmaceuticals as long as they are recommended by an expert | 223 | 3.7085 | .06228 | .93011 |
| PI 8 The country of origin of imported pharmaceuticals is important for customers buying decision, | 223 | 3.8744 | .06643 | .99205 |
| Valid N (listwise) | 223 | | | |

Source: Survey result, 2018

As indicated in Table 4.11 above, two of the measurement items were found to be lower than 3 and six of the items were greater than 3. The descriptive statistics indicated that consumers in Ethiopia would like to buy and use of imported pharmaceuticals are effective with faster response time. However, consumers do not buy imported pharmaceuticals for the belief that they have lower side effect or for their affordable price. Besides, the descriptive statistics related to purchase intention revealed that, customers would like to buy imported pharmaceuticals for their

quality approval by FMHACA. Customers would like also intend to buy imported pharmaceuticals as long as they are recommended by an expert. Finally, the statistical result indicated that the country of origin of imported pharmaceuticals is an important consideration for customers buying decision.

Generally the descriptive statistics showed that consumers in Ethiopia have an average level of cognition about imported pharmaceuticals, average level of favorable attitude toward imported pharmaceuticals, average level of social compliance for purchase and use of imported pharmaceuticals, average level of product attributes, average level of utilitarian value, and average level of intention or inclination to purchase and use of imported pharmaceuticals. The summarized version of the descriptive statistics is presented in Table 12 below.

Table 4.12: Descriptive statistics of the study variables

| | N | Mean | | Std. Deviation |
|---------------------|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Std. Error | Statistic |
| Cognition | 219 | 3.5266 | .04864 | .71973 |
| Normative Belief | 217 | 3.1005 | .04920 | .72473 |
| Social Influence | 222 | 3.4721 | .05019 | .74775 |
| Product Attributes | 223 | 3.4816 | .04844 | .72334 |
| Utilitarian Value | 223 | 3.0949 | .06478 | .96735 |
| Purchase Intentions | 222 | 3.4212 | .05581 | .83161 |
| Valid N (listwise) | 212 | | | |

Source: Survey result, 2018

4.5 Correlation Analysis

Correlation is a means of analyzing the relationship between variables measuring the direction and extent of association between two or more variables. According to Mooi and Sarstedt (2011), the strength of the relationship between two variables follows the following pattern.

| Pearson coefficient | Value |
|---------------------|-------------|
| 0.80 – 1.00 | Very strong |
| 0.60 – 0.79 | Strong |
| 0.40 – 0.59 | Moderate |
| 0.20 – 0.39 | Weak |
| 0.00 – 0.19 | Very weak |

The Pearson correlation among the variables of the study is presented below in Table 13.

Table 4.13: Correlation analysis

| | | Cognition | Normative Belief | Social Influence | Product Attributes | Utilitarian Value | Purchase Intentions |
|---------------------|---------------------|-----------|------------------|------------------|--------------------|-------------------|---------------------|
| Cognition | Pearson Correlation | 1 | .640** | .424** | .677** | .077 | .558** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .257 | .000 |
| | N | 219 | 214 | 218 | 219 | 219 | 218 |
| Normative Belief | Pearson Correlation | .640** | 1 | .567** | .599** | .199** | .509** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .003 | .000 |
| | N | 214 | 217 | 216 | 217 | 217 | 216 |
| Social Influence | Pearson Correlation | .424** | .567** | 1 | .489** | .218** | .495** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .001 | .000 |
| | N | 218 | 216 | 222 | 222 | 222 | 221 |
| Product Attributes | Pearson Correlation | .677** | .599** | .489** | 1 | .113 | .589** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .092 | .000 |
| | N | 219 | 217 | 222 | 223 | 223 | 222 |
| Utilitarian Value | Pearson Correlation | .077 | .199** | .218** | .113 | 1 | .149* |
| | Sig. (2-tailed) | .257 | .003 | .001 | .092 | | .027 |
| | N | 219 | 217 | 222 | 223 | 223 | 222 |
| Purchase Intentions | Pearson Correlation | .558** | .509** | .495** | .589** | .149* | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .027 | |
| | N | 218 | 216 | 221 | 222 | 222 | 222 |

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

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

Source: Survey result, 2018

Based on the correlation table presented above, there is a moderate ($r = 0.558$) and significant ($p = 0.001$) relationship between consumers cognition and their purchase intentions. This clearly indicates that there is a genuine and positive relationship between customers' cognition about imported pharmaceuticals and their purchase intentions. The correlation analysis further revealed that there is a moderate ($r = 0.509$) and significant ($p = 0.001$) relationship between customers' normative belief and their purchase intentions. This correlation result showed that there is a positive and genuine relationship between normative belief of customers and purchase intention of imported pharmaceuticals. The correlation analysis also showed that there is a moderate ($r = 0.495$) and significant ($p = 0.001$) relationship between social influence and customers purchase intention. Besides, the statistical result revealed that there is a moderate ($r = 0.589$) and significant ($p = 0.001$) relationship between product attributes of imported pharmaceuticals and customers purchase intention. This is also a clear indication of the positive and meaningful correlation between the product characteristics and customers purchase intentions. Finally, the correlation analysis showed that there is a weak ($r = 0.149$) and significant ($p = 0.027$) relationship between utilitarian value and purchase intention.

4.6 Multiple Regression Analysis

Regression analysis helps to analyze relationships between multiple independent variables and one dependent variable. Regression analysis can provide insights that few other techniques can. According to Field (2009), regression analysis helps to indicate if independent variables have a significant relationship with a dependent variable and to test the relative strength of different independent variables' effects on a dependent variable. Besides, a regression analysis allows to make predictions.

In order to carry out a multiple regression, there is a need to test various statistical assumptions including:

- test of normality and
- test of multi-collinearity.

4.6.1 Normality Test

Meyer et al. (2005) purported that the larger the sample size used in the study, the more precise and stable the estimates of the population parameter would be for statistical inferences. According to the central limit theorem, as long as the sample size is 30 or more; the sampling distribution would tend to be normal irrespective of the population distribution. The sample size used in this study was large enough to satisfy the requirement of normality according to the central limit theorem (Field, 2009). The following table shows the skewness and kurtosis values to test the normality of the data distribution.

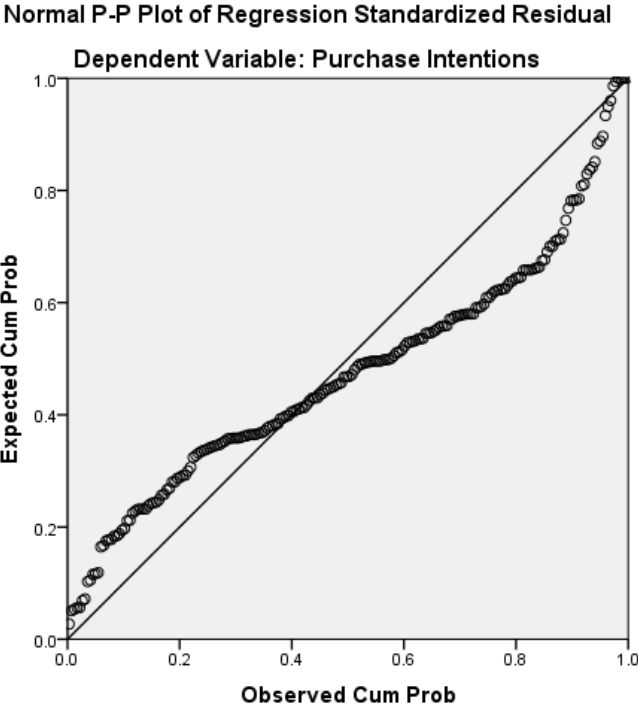
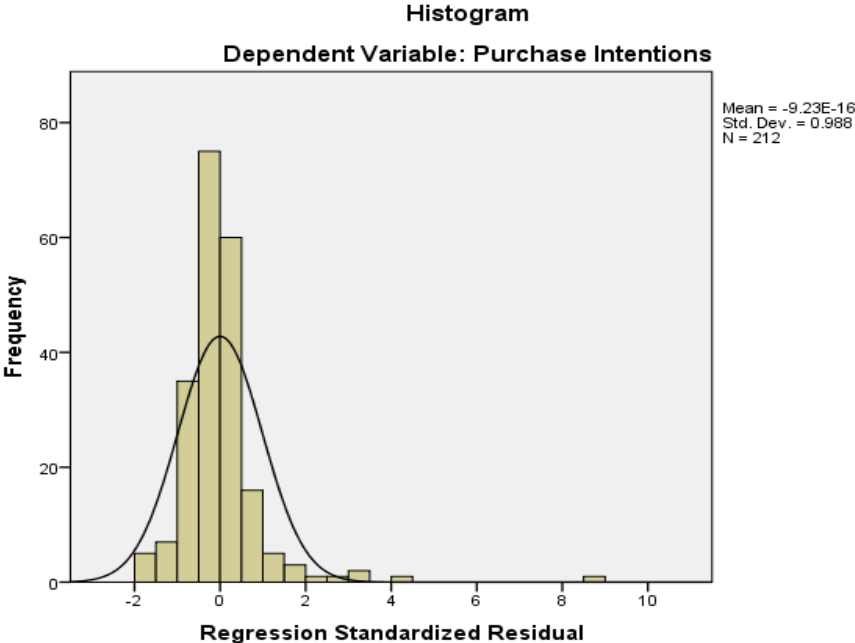
Table 4.14 Test of normality

| | Skewness | | Kurtosis | |
|---------------------|-----------|------------|-----------|------------|
| | Statistic | Std. Error | Statistic | Std. Error |
| Cognition | -.145 | .164 | -.077 | .327 |
| Normative Belief | .042 | .165 | .293 | .329 |
| Social Influence | -.227 | .163 | -.533 | .325 |
| Product Attributes | -.278 | .163 | -.231 | .324 |
| Utilitarian Value | 1.477 | .163 | .427 | .324 |
| Purchase Intentions | 1.788 | .163 | 1.860 | .325 |
| Valid N (listwise) | | | | |

Source: Survey result, 2018

According to Kline (2011), a skewness and kurtosis level with absolute values greater than 3 are regarded as extreme when the acceptable level of skewness and kurtosis (3) are violated, it suggests a problem that should be addressed before performing any inferential statistical analysis. The result showed that the maximum value for skewness was 1.788 and the maximum value for kurtosis was 1.860. Since the skewness and kurtosis values were lower than the acceptable level (3), the data appeared to be normal. The skewness and kurtosis values of the variables of the study are shown above in Table 4.14.

In addition to skewness and kurtosis, the histogram diagram presented below on Fig 4.3 also helps to show the normality of the data.



Since the histogram shows that most of the data are concentrate in the middle of the chart, the data distribution can be taken as normal.

4.6.2 Test of Multicollinearity

Multicollinearity exists when there is a strong correlation between two or more predictors in a regression model. If there is a high degree of correlation between independent variables, a problem of multicollinearity will be observed. In multiple regression analysis, the regression coefficients become less reliable as the degree of correlation between the independent variables increases. In such a situation we should use only one set of the independent variable to make our estimate(Field, 2009). To test if there was a problem of multicollinearity, tolerance and variance inflation factor (VIF) were used. Table 4.15 below presents the tolerance and VIF level of the independent variables.

Table 4.15: Table Test of collinearity

| Model | Collinearity Statistics | |
|--------------------|-------------------------|-------|
| | Tolerance | VIF |
| (Constant) | | |
| Cognition | .448 | 2.231 |
| Normative Belief | .452 | 2.211 |
| Social Influence | .627 | 1.594 |
| Product Attributes | .469 | 2.133 |
| Utilitarian Value | .934 | 1.071 |

Source: Survey result, 2018

According to Field(2009), the independent variables are said to be free from multicollinerity problem where the tolerance value is greater 0.20 and VIF is less than 5. As presented above in Table 4.15, since the tolerance value of all the five independent variables are greater than 0.20 and since the VIF is lower than 5, there is no multicollinearity problem.

4.6.3 Multiple Regression Results

This section presents the model summary, ANOVA, and coefficients that show the degree of relationship between each of the five independent variables and purchase intention which is the dependent variable of the mode. Table 4.16 below presents the model summary.

Table 4.16: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .665 ^a | .442 | .428 | .64091 |

a. Predictors: (Constant), Utilitarian Value, Cognition, Social Influence, Product Attributes, Normative Belief

b. Dependent Variable: Purchase Intentions

Source: Survey result, 2018

R shows the values of the multiple correlation coefficient that measures the association between the five independent variables and purchase intention. Therefore, the simple correlation between the predictor variables (cognition, normative belief, social influence, product attributes, and utilitarian value) and the outcome variable (purchase intention) was 0.665. R² is a measure of how much of the variability in the outcome is accounted for by the predictors. As revealed by the model summary, 44.2% of consumers purchase intentions of imported pharmaceuticals is affected by cognition, normative belief, social influence, product attributes, and utilitarian value and the rest is influenced by other factors which are not accounted in the model.

The adjusted R² gives us some idea of how well the model generalizes and to what extent its value remains to be the same, or very close to, the value of R². In this case the difference for the final model is small as the difference between the values is $.442 - .428 = .014$ (about 1.4%). As suggested by Field (2009), this shrinkage means that if the model were derived from the population rather than a sample it would account for approximately 1.4% less variance in the outcome.

The following table presents the ANOVA tables to assess the overall fit of the model.

Table 4.17: ANOVAa

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 66.965 | 5 | 13.393 | 32.605 | .000 ^b |
| | Residual | 84.618 | 206 | .411 | | |
| | Total | 151.583 | 211 | | | |

a. Dependent Variable: Purchase Intentions

b. Predictors: (Constant), Utilitarian Value, Cognition, Social Influence, Product Attributes, Normative Belief

Table 4.17 indicates that the model is fit ($F=35$, $p = 0.001$).

Table 4.18 shows the coefficients of each independent variable in predicting purchase intentions and their corresponding level of significance.

Table 4.18: Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|-----------------------------|------------|---------------------------|------|-------|------|
| | B | Std. Error | Beta | | | |
| 1 | (Constant) | .174 | .275 | | .635 | .526 |
| | Cognition | .262 | .091 | .224 | 2.886 | .004 |
| | Normative Belief | .075 | .090 | .065 | .836 | .404 |
| | Social Influence | .239 | .073 | .215 | 3.273 | .001 |
| | Product Attributes | .333 | .088 | .288 | 3.792 | .000 |
| | Utilitarian Value | .032 | .048 | .036 | .670 | .504 |

a. Dependent Variable: Purchase Intentions

Source: Survey result, 2018

Based on the regression coefficients presented above in Table 4.18 the model is specified as follows.

$$\text{Purchase Intention} = 0.174 + 0.262 \text{ cog} + 0.075 \text{ NB} + 0.239 \text{ SI} + 0.333 \text{ PA} + 0.032 \text{ UV} + e$$

Where,

Cog: Cognition

NB: Normative beliefs

SI: Social influence

PA: Product attributes

UV: Utilitarian value

e: error term

Therefore, based on the regression coefficients specified in the model, the relationship between the five independent variables and the dependent variable is presented in the following diagram.

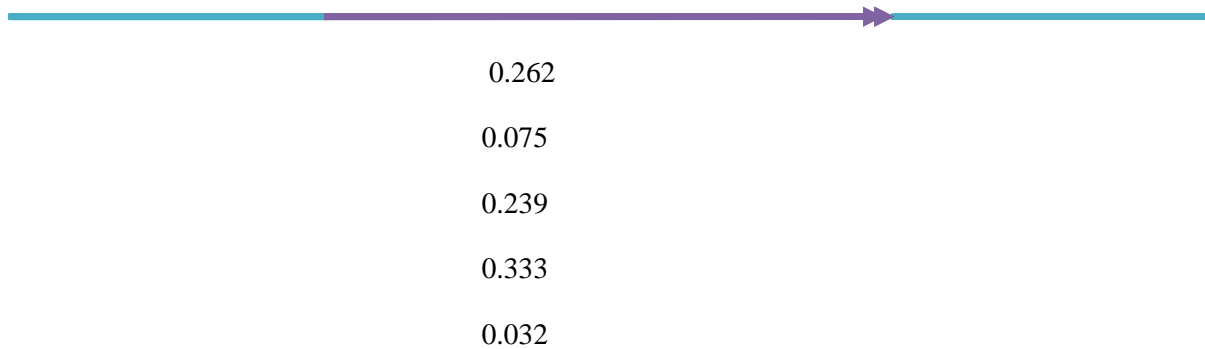


Figure 4.4: The relationship between consumer attitude dimensions and purchase intention

Source: Survey result, 2018

As presented in Table 4.18 above, cognition has a positive and significant effect ($B = 0.262$, $p = 0.001$) on consumers purchase intention of pharmaceuticals. Normative belief has a positive and non significant effect ($B = 0.075$, $p= 0.404$) and social influence also has a positive and significant effect ($B = 0.239$, $p= 0.001$). Besides, product attributes has a positive and significant effect ($B = 0.333$, $p= 0.001$) and utilitarian value has a positive but insignificant effect ($B = 0.032$, $p= 0.504$) on purchase intention of pharmaceuticals in Ethiopia.

4.7 Hypotheses Testing

The study involves 5 hypotheses which were identified based on a thorough literature review. The five hypotheses developed and the results are presented below.

H₁: Cognition has a positive and significant effect on purchase intention of pharmaceuticals in Ethiopia.

The multiple regression result presented above in Table 4.18 revealed that cognition has a positive and significant effect ($B = 0.262$, $p = 0.001$) on customers purchase intention of pharmaceuticals in Ethiopia. This hypothesis is supported by empirical data collected in the pharmaceutical industry in Ethiopia as the significance level ($p = 0.001$) is lower than 0.05. This indicates that customers would like to gather valuable information, advice and guidance from their medical doctors or pharmacists before they make a buying decision as pharmaceuticals are high involvement products.

H₂: Normative belief has a positive and significant effect on purchase intention of pharmaceuticals in Ethiopia.

The multiple regression result presented above in Table 4.18 showed that normative belief has a positive but insignificant effect ($B = 0.075$, $p = 0.404$) on customers purchase intention of pharmaceuticals in Ethiopia. This hypothesis is rejected as the significance level ($p = 0.404$) is greater than 0.05. The empirical data collected in the pharmaceutical industry in Ethiopia failed to support this hypothesis. This indicates that customers' buying decision is of pharmaceuticals is not influenced by customers emotion of the product.

H₃: Social influence has a positive and significant effect on purchase intention of pharmaceuticals in Ethiopia.

The multiple regression result presented above in Table 4.18 showed that social influence has a positive and significant effect ($B = 0.239$, $p = 0.001$) on customers purchase intention of pharmaceuticals in Ethiopia. This hypothesis is confirmed and supported as the significance level ($p = 0.001$) is found to be below 0.05. This indicates that customers' buying decision of pharmaceuticals is influenced by the professional advice and guidance provided by medical doctors and pharmacists about the product.

H₄: Product attributes has a positive and significant effect on purchase intention of pharmaceuticals in Ethiopia.

The multiple regression result presented above in Table 4.18 showed that product attributes has a positive and significant effect ($B = 0.333$, $p = 0.001$) on customers purchase intention of pharmaceuticals in Ethiopia. This hypothesis is confirmed as the significance level ($p = 0.001$) is found to be below 0.05. This indicates that customers would like to look into the various attributes of the product based on the advice and information they get from their medical doctors before they make buying decision of pharmaceuticals.

H₅: Utilitarian value has a positive and significant effect on purchase intention of pharmaceuticals in Ethiopia.

The multiple regression result presented above in Table 4.18 showed that product attributes has a positive and significant effect ($B = 0.032$, $p = 0.504$) on customers purchase intention of pharmaceuticals in Ethiopia. This hypothesis is rejected as the significance level ($p = 0.504$) is found to be greater than 0.05. This indicates that customers in Ethiopia do not base their purchase of imported pharmaceuticals on a rational judgment related to the utilitarian value of the product. The possible explanation for this would be the fact that most pharmaceutical products are technically complicated and most consumers are devoid of the expertise.

4.8 Discussion

Consumers vary in their commitment to an attitude and the degree of commitment is related to their level of involvement with the attitude object. At a high level of involvement like pharmaceuticals, deep-seated attitudes are internalized and become part of the person's value system. These attitudes are very difficult to change because they are so important to the individual. Therefore, distributors or multinational pharmaceuticals operating in the Ethiopian market shall focus on awareness creation and internalization of the benefits associated with purchase and use of imported pharmaceuticals at various levels of engagement in the value chain.

The findings of this study were found to be consistent with the results of a study conducted by Insead et al. (1991) which revealed that consumers cognition of the product influences customer purchase preference in addition to the product characteristics, location, and date of delivery of the product. Likewise, the result of this study was also found to be similar with the result of a study undertaken by Lodorfos et al. (2006) which revealed that consumers cognition through direct experience with the brand, price tolerance, brand trust and the subjective norm or opinions of others are important determinants of purchase behavior of pharmaceutical products.

According to the principle of cognitive consistency (Solomon, 2006), consumers value harmony among their thoughts, feelings and behaviors, and they are motivated to maintain uniformity among these elements. The consistency principle is an important reminder that attitudes are not formed in a vacuum where a significant determinant of the way an attitude object will be evaluated is how it fits with other related attitudes already held by the consumer. Since most consumers in Ethiopia believe that imported products have better quality, consumers' attitude toward imported pharmaceuticals is also found to be largely positive and consistent with their established belief.

A consumer's attitude or evaluation of an attitude object depends on the beliefs he or she has about several or many attributes of the object. With this regard, the study revealed that consumers in Ethiopia are keen to know about the attributes of imported pharmaceuticals. This

implies that distributors or representatives of international pharmaceutical companies in Ethiopia shall cater their effort through advertising or personal selling on those attributes that are appealing to Ethiopian customers. This study found out that product attributes have a significant effect on purchase intention of pharmaceuticals in Ethiopia. With this regard, this study provided evidence which is consistent with the finding of a study conducted by Pahud de Mortanges, Rietbroek & MacLean Johns (1997). Pahud de Mortanges, Rietbroek & MacLean Johns (1997) revealed that consumers form beliefs that are linked to the attributes of the product. The same study also claimed that the attitude toward the product then becomes a function of a person's evaluation of the product attributes.

The findings of this study contradict the findings of the study by Mintzes et al. (2002) which found that normative beliefs manifested in the forms of requests patients' for medicines are a powerful driver of prescribing decisions. Besides, the finding of this study on the influence of subjective norm as a driver of purchase behavior is not supported by a study conducted by Ha (1998).

According to the social theory (Solomon, 2006), other people have the power of influencing behavior where many of consumers' behaviors are not determined in isolation. With this regard, the subjective norm (SN) which includes the intensity of a normative belief (NB) that others believe an action should be taken or not taken and the motivation to comply with social influence or the degree to which the consumer takes others' anticipated reactions into account when evaluating a purchase are important considerations.

Like the findings of a study by Ajzen and Fishbein (1980), this study also revealed that the opinions of family and friends are reported to influence an individual's intentions and behavior on the purchase of pharmaceuticals. This study produced the same similar with a study done in Poland by Turek et al. (2014) about the determinants of consumption behavior of painkillers and anti-inflammatory drugs which revealed the role of compliance through consultation with the doctor or pharmacist and reading the medication leaflet contents .

According to Solomon (2006), the utilitarian function or value of a product is related to the basic principles of gain and loss related to the transaction. For customers to develop a positive affect toward imported pharmaceuticals, distributors or multinational pharmaceuticals operating in the Ethiopian market shall promote their products using advertising that stress straightforward product benefits appealing to the utilitarian function of customers.

This study couldn't support the claim that utilitarian value of pharmaceuticals have a significant effect on purchase intention. However, this assertion was not supported by findings of a study done in Malaysian pharmaceuticals (Chua et al., 2009) which found out that the utilitarian value or function of pharmaceuticals influence purchase behavior of consumers.

CHAPTER 5 SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1 Summary of Findings

The study revealed that consumers attitude toward imported pharmaceuticals has largely a bearing effect on their purchase intention. The study tried to measure consumers' inner feelings that reflect whether they are favorably or unfavorably predisposed to imported pharmaceuticals. Descriptive statistic tools were used to summarize the pattern of the data and inferential statistical tools were used to test whether consumers attitude influence their purchase decision.

The descriptive statistics revealed that consumers' cognition, normative belief, social influence, product attributes, and utilitarian value toward imported pharmaceuticals are above average. The mean score of consumer cognition, normative belief, social influence, product attributes, utilitarian value, and purchase intention were found to be 3.53, 3.10, 3.47, 3.48, 3.09 and 3.42 respectively. However, these descriptive statistics alone could not indicate whether the five independent variables exert a significant influence on consumers' buying decision of imported pharmaceuticals in Ethiopia. Therefore, correlation and multiple regression analysis were conducted to test the extent to which the relationships were statistically meaningful and significant.

The correlation analysis revealed that the covariance between consumers' cognition, normative belief, social influence, and product attributes with customers purchase intention of imported pharmaceuticals was positive, moderate ($r \geq 0.5$) and statistically significant ($p < 0.05$). However, the Pearson correlation of utilitarian value was weak ($r \geq 0.149$) even though it has a positive and significant ($p < 0.05$) relationship with customers purchase intention of imported pharmaceuticals in the Ethiopian market.

The multiple regression analysis also revealed the prediction power of each independent variable on customers' purchase intention and its statistical significance. The summary of the regression analysis showed that consumers' cognition, normative belief, social influence, product attributes and utilitarian value together explain 44.2% of customers purchase intention of imported pharmaceuticals and the overall model was found to be fit ($F=32.65$, $p = 0.001$). The multiple

regression analysis also revealed that three of the hypotheses postulated were supported and two of hypotheses were rejected. The following table shows the hypotheses and the results obtained.

Table 4.19: Summary of hypotheses test results

| Hypotheses | Statistical results | Decision |
|---|----------------------------|-----------------|
| H ₁ : Consumers cognition has a positive and significant effect on purchase intention of imported pharmaceuticals. | $B = 0.262, p = 0.001$ | Confirmed |
| H ₂ : Normative belief has a positive and significant effect on purchase intention of imported pharmaceuticals. | $B = 0.075, p = 0.404$ | Rejected |
| H ₃ : Social influence has a positive and significant effect on purchase intention of imported pharmaceuticals. | $= 0.239, p = 0.001$ | Confirmed |
| H ₄ : Product attributes has a positive and significant effect on purchase intention of imported pharmaceuticals. | $B = 0.333, p = 0.001$ | Confirmed |
| H ₅ : Utilitarian value has a positive and significant effect on purchase intention of imported pharmaceuticals. | $B = 0.032, p = 0.504$ | Rejected |

5.2 Conclusion

According to Schiffman and Kanuk (2000), as consumers' attitudes are an outcome of psychological processes, they are not directly observable but must be inferred from what people say or what they do. Therefore, the study investigated consumers' attitudes toward purchase intention of imported pharmaceuticals by asking questions inferred from their behavior. The study employed a quantitative research approach using a deductive research paradigm where theories and models well established in the literature were used to test the extent to which consumers attitude influence their purchase intention of pharmaceuticals in the Ethiopian market. The study used both descriptive and explanatory research designs to describe state of consumers' attitude and to examine its effect on purchase intention. 296 questionnaires were filled by patients and pharmacists and 223 questionnaires were found to be usable for statistical analysis.

Both descriptive and inferential statistics were used to summarize the data and infer conclusions. The descriptive statistics revealed that consumers' cognition, normative belief, social influence, product attributes, and utilitarian value mean score was greater than 3. The degree and direction of association or covariance between the five dimensions of consumer attitude and purchase intention was tested through correlation analysis. The Pearson correlation (r) was found to be all positive and moderate except that of utilitarian value which showed a weak relation ($r = 0.149$). The multiple regression analysis revealed that 44.2% of consumers' purchase intention of pharmaceuticals is explained by cognition, normative belief, social influence, product attributes, and utilitarian value. Besides, it was found out that the three hypotheses which postulate that 'cognition, social influence, and products attributes have a positive and significant effect on purchase intention' were confirmed. Finally the two hypotheses with a claim that normative beliefs and utilitarian value have a positive and significant effect were rejected.

5.3 Recommendation

1. Consumers cognition through direct experience with the brand, price, brand trust and the subjective norm or opinions of others are important determinants of purchase behavior of pharmaceutical products. Therefore, multinational pharmaceuticals operating in the Ethiopian market or local distributors of imported pharmaceuticals shall focus on awareness creation and internalization of the benefits associated with purchase and use of imported pharmaceuticals at various levels in the value chain. These companies can enhance the cognition level of users, pharmacists or medical doctors through organizing seminars, exhibitions, or other promotional events.
2. As consumers in Ethiopia are interested to know about the attributes of imported pharmaceuticals, distributors or representatives of international pharmaceutical companies in Ethiopia shall cater their effort through advertising or personal selling on those attributes that are appealing to Ethiopian customers. With this regard, for customers to develop a positive attitude toward imported pharmaceuticals, distributors or multinational pharmaceuticals operating in the Ethiopian market shall promote their products using advertising that stress product attributes appealing to the utilitarian function of customers.
3. As pharmaceuticals are generally high involvement products in terms of both the relevance and the risk factor associated with them, multinational companies or local distributors of imported pharmaceuticals shall use renowned medical doctors as endorsers in their promotion since the public tends to take their opinion to be credible.

5.4 Future Research

The following recommendations are drawn for future research.

1. As stated in the research findings, 44.2% of consumers purchase intentions are explained by consumers' attitude. This implies that 55.8% of purchase intention would be explained by factors which had not been captured in the model. Therefore, it is recommended that a future research might be carried out taking extraneous variables such as macro level factors, ethnocentrism, and consumers lifestyles in to account.

2. Since the geographic scope of the study was delimited to Addis Ababa; it would be practically difficult to generalize the findings to customers living in other parts of Ethiopia. Therefore, a future study is suggested to do the same study targets patients and pharmacists at least in major cities in Ethiopia.
3. As the normative belief and utilitarian value were not found to have a statistically significant effect on consumers' purchase intention of pharmaceuticals, a future study might be conducted incorporating other dimensions based on an elaborate and systematic literature review.
4. A grounded and qualitative research might be conducted to explore the most important factors that influence consumers' purchase intention of pharmaceuticals taking the context of the Ethiopian pharmaceutical market.

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