

***PROSPECTS AND CHALLENGES OF PHARMACEUTICALS  
SUPPLY CHAIN MANAGEMENT PRACTICES AT ETHIOPIAN  
PHARMACEUTICALS SUPPLY AGENCY, JIMMA BRANCH***

***A THESIS SUBMITTED TO JIMMA UNIVERSITY, COLLEGE OF  
BUSINESS AND ECONOMICS, SCHOOL OF POST GRADUATES  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE  
AWARD OF THE DEGREE OF MASTER OF ART OF LOGISTIC  
AND TRANSPORTATION MANAGEMENT***

***BY:***

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***JULY, 2020***

***JIMMA, ETHIOPIA***

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### **Declaration**

I hereby declare that, this thesis entitled “Prospects and challenges of pharmaceuticals supply chain management practices at Ethiopian Pharmaceuticals Supply Agency, Jimma Branch, has been carried out by me under the guidance and supervision of Dr. Kenenisa and Mrs.TigistWaktole.The thesis is original and has not been submitted for the award of any degree or diploma to any university or institutions.

Researcher’s Name

Date

Signature

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## **Certificate**

This is to certify that the thesis entitled “Prospects and challenges of pharmaceuticals supply chain management practices at Ethiopian Pharmaceuticals Supply Agency, Submitted to Jimma University, College of Business and Economics for the award of Degree of Master of Logistics and Transport Management (LTM) is a record of genuine research work carried out by WakijiraAdem, under our guidance and supervision. Therefore, we hereby declare that no part of this thesis has been submitted to any other university or institution for the award of any degree or diploma.

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## ABSTRACT

*SCM practices are defined as the set of activities undertaken by an organization to promote effective management of its supply chain. The main objective of the study is to assess the prospect and challenges of pharmaceuticals supply chain management practices at EPSA, Jimma branch. This research was aimed to assessing the prospects and challenges of Pharmaceuticals SCM practices. A descriptive and Cross-sectional survey design was employed in this study. Descriptive survey as described by the study was used both quantitative and qualitative research approaches. A representative sample for questionnaire was selected from the employees of the agency based on probability sampling of. Stratified sampling was employed based on the strata of the departments and simple random sampling using random table will be done accordingly. The data was obtained through questionnaire was first edited for their completeness, categorized, registered. Based on this the data was analyzed using descriptive statistical analysis techniques. With regards to the descriptive analysis the study was analyzed using mean and standard deviation.. The study was used SPSS version 20 software package in the entire analysis part. The result of the study showed that there was a good practice of customer relationship management, strategic supplier partnership and information sharing at EPSA Jimma branch. The prospects of supply chain management practices of the agency, the agency has good customer relationship management practices which ensured customer oriented service provision. Thus, the agency has concerned its customers to be closely treated. In a similar vein the agency supplier strategic partnership and information sharing practices have been found in a good status.*

***Key Words: Supply chain management practices, Customer relationship management, Strategic partnership, Information Sharing.***

## **ACKNOWLEDGEMENT**

I would like to thank my advisors, Dr. Kenenisa Lemifor his support in providing relevant orientation and guidance in the preparation of this research proposal. I could not have finalized this protocol without his continuous professional guidance and constructive comments, scarifying his priceless time.

Above all, thanks to the Almighty God for the strength gave me to carry out this academic work.

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1. BACKGROUND OF THE STUDY**

Supply chain management (SCM) is an integrated approach beginning with planning and control of materials, logistics, services, and information stream from suppliers to manufacturers or service providers to the end client; it represents a most important change in business management practices (Fantazy et al., 2010). SCM is one of the most effective ways for firms to improve their performance (Ou et al., 2010). With the purpose of managing the supply chain actions for realizing improvement in enterprise performance, it is necessary to improve the planning and management of activities such as materials planning, inventory management, capacity planning, and logistics (Chandra and Kumar, 2000) with suppliers and clients.

Currently, the topics that can be considered essential to research suggestions in SCM include: supply chain coordination, distribution and transport, inventory, order management, planning and optimization, supply chain integration, reverse logistics, supply chain information, supplier and vender selection, and green SCM (Hu et al., 2010).

Koh et al (2007) states that SCM's practices involve a set of activities undertaken by organization to promote effective management of their supply chain. Tutuncu and Kucukusta (2008) go beyond that and states that SCM lead to changes in the structure of the organization by integrating internal functions and linking these with the external operation of suppliers, customers and others stakeholders of the supply chain.

SCM practices are defined as the set of activities undertaken by an organization to promote effective management of its supply chain (Li et al., 2005, 2006; Koh et al., 2007); as the approaches applied in integration, managing and coordination of supply, demand and relationships in order to satisfy clients in effective way (Wong et al., 2005); as tangible activities/technologies that have a relevant role in the collaboration of a focal firm with its

suppliers and/or clients (Vaart and Donk, 2008); and as the approach to involve suppliers in decision making, encouraging information, sharing and looking for new ways to integrate upstream activities. As a consequence, it involves developing customer contacts by customer feedback to integrate the downstream activities and delivering orders directly to customers (Chow et al., 2008). In this sense, studying SCM practices supports the view theory regarding SCM.

While interest in SCM is increasing day-by-day, there is no consensus about the conceptual and methodological research bases of SCM, generating gaps in the state-of-the-art of this research field (Burgess et al., 2006). It is impossible to develop sound SCM theory without acceptable frameworks and definitions of terms (Stock and Boyer, 2009). In addition, the lack of a comprehensive view of SCM practices and the lack of a reliable measure of the concept have constrained guidelines to the practice of SCM and further research on the topic (Li et al., 2005).

The study of practices on Supply Chain Management (SCM) improves the understanding of how all the process are integrated in way to provide products, services and information that add value for costumers (Cooper et al., 1997). The purpose of this paper is highlighting the prospects and challenges of pharmaceuticals supply chain practices at Ethiopian Pharmaceuticals Supply Agency of Jimma branch. The study among the supply chain practices it was mainly focused on customer relationship management, strategic supplier partnership, information sharing which are the crucial practices at EPSA pharmaceuticals supply chain operations. Furthermore the study was investigated Challenges of Pharmaceuticals Supply chain management practices in the study area.

## 1.2. Statement of the problem

A high level of confusion has occurred amongst supply chain scholars during the past decades by the several SCM definitions that have been proposed in the literature (Stock and Boyer, 2009). Three key subjects emerged from the various definitions: activities, benefits, and constituents/components. The first theme of SCM definitions, activities, contains the flow of materials and information, and networks of relationships, focusing on both internal (within the organization) and external (outside the organization). Second, the benefits resulting from effective implementation of SCM strategies are to add value and increase customer satisfaction. Third, the components or constituent parts of SCM; what organizations, functions and processes involve the supply chain (Stock et al., 2010).

In today's competitive business there is an increased focus on delivering value to the customer. The focus on attention of most of businesses is providing products and services that are more valuable compared to its competitors. Concurrent to the focus on customer value, the marketplace in which businesses operate today is widely recognized as being complex and turbulent (Christopher, 2000; Goldman *et al.*, 1995). The growth of supply chain aims to improve profitability, customer response and ability to deliver value to the customers and also to improve the interconnection and interdependence among firms. Due to market expanding from domestic market to global market increase customer demands, for instance demanding lower prices, faster delivery, higher quality products or services and increase the variety of items (Braunscheidel, 2005). According to Towil and Christopher, (cited in Thatte, 2007), the end customer in the marketplace today determined by the success of failure of supply chains management practices. They stated that getting the right product, at the right price, at the right time to the customer is not only improved competitive success but also the key to survival.

In Ethiopia, a country wide assessment of the pharmaceuticals supply management system was undertaken to document the challenges faced in the procurement, storage and distribution of pharmaceuticals. The assessment revealed that long procurement lead times, inadequate storage infrastructure, and unsystematic distribution practices were major constraints to pharmaceuticals supply management system in the country. Based on the assessment result the main causes of these problems are poor procurement planning due to the lack of a logistics management

information system (LMIS), inadequate staff capacity in the Federal Ministry of Health (FMOH) Pharmaceutical Administration and supply Service and non-optimal administrative procedures at federal and regional government levels (FMOH, 2005).

Accordingly, Ethiopia's Federal Ministry of Health (FMOH) has been working to ensure an efficient and high-performing healthcare supply chain that ensures equitable access to affordable medicines for all Ethiopians. However, there are various challenges that remain, including an inadequate supply of quality and affordable essential pharmaceuticals, poor storage conditions, and weak stock management, which has resulted in high levels of waste and stock outs (Shewarega *et al.*, 2015).

Many previous researches explored the importance of integrating suppliers, manufacturers, and customers or supply chain integration (Frohlich and Westbrook, 2001; Clinton and Closs, 1997) (i.e. supply chain management) so as to obtain flexibility and speed. By addressing supply chain management practices that contribute to supply chain responsiveness, will help the researcher better understand the scope and activities related to supply chain management that create an enhanced level of supply chain responsiveness in competitive business marketplace. The purpose of this study is to find out the current supply chain management practices and the challenges which faced these practices. This study also investigates prospects and challenges of pharmaceutical supply chain of Ethiopian Pharmaceuticals Supply Agency at Jimma branch. The paper is organized as follows.

Six distinctive constructs of SCM practices emerged, including strategic supplier partnership, customer relationship, information sharing, information quality, internal lean practices and postponement. All the items were measured on a five-point scale (Li *et al.*, 2005, 2006).

Zhou and Benton (2007) consider three constructs of supply chain practices (supply chain planning, just-in-time (JIT) production, and delivery practice), because they have been shown to be closely related to delivery performance. Each statement required responses based on a seven-point Likert scale (1 = not implemented, 7 = extensively

implemented). A list of SCM constructs used in previous literature regarding the SCM practices is relying on the extant literature.

Koh et al. (2007) and Bayraktar's et al. (2009) studies identify a set of 12 SCM practices: close partnership with suppliers, close partnership with customers, just in time supply, strategic planning, supply chain benchmarking, few suppliers, holding safety stock, e-procurement, outsourcing, subcontracting, 3PL, many suppliers. Items were measured on five-point scales ranging from 1 (not at all implemented) to 5 (fully implemented). Koh et al. (2007) measuring two constructs and Bayraktar et al. (2009) measuring three constructs. As observational assessment of the agency on its past experience it faced the challenges to handle customer complaints, due its poor customer relationship management, and also identified communication gap as a result of weak trends of information sharing. Additionally the agency should not had strong structural alignment to the supplier strategic partnership. Therefore, this study will be set 3 SCM practices: Customer relationship, Strategic supplier partnership, and Information sharing. The study has been conducted on the indicated set of SCM practices on the agency for the first time, which the main gap filling of the study. This study was also had a methodological and variables gap from the former studies.



### **1.3. Basic Research Questions**

This study will be tries to find answers for the following basic research questions;

- / What are the prospects of Customer relationship management at EPSA, Jimma branch?
- / What is the prospect of strategic supplier partnership of EPSA, Jimma branch?
- / What is the prospect of information sharing at EPSA, Jimma branch?
- / What are the challenges faced by EPSA, Jimma branch\_in practicing supply chain management?

### **1.4. Objectives of the study**

#### **1.4.1. General Objective**

The main objective of the study is to assess the prospect and challenges of pharmaceuticals supply chain management practices at EPSA, Jimma branch.

#### **1.4.2. Specific objectives**

- ❖ To identify the prospects and practices of customer relationship management at EPSA, Jimma branch.
- ❖ To identify the prospects and practices of strategic supplier partnership of EPSA, Jimma branch.
- ❖ To assess the prospects and practices of information sharing of EPSA Jimma branch
- ❖ To identify the challenges this faced EPSA Jimma branch on its current SCM practices.

### **1.5. Significance of the Study**

This research is aimed to assessing the prospects and challenges of Pharmaceuticals SCM practices. The outcome would helpful to pharmaceutical supply chain organizations as enriching insights to identify the supply chain management practices measures for the supply chain performance of the organizations.

This study, would adapt an existing supply chain management practices framework developed for supply chains considering the prospects and challenges. The framework of this research will be used as a basis for a prospects pharmaceutical supply chain management practices.

Moreover, in Ethiopia Pharmaceutical Supply Agency has not sufficiently studied, so the result of this study will help to better understanding of the prospects and challenges of EPSA's SCM practices. And also it would contribute for understanding of pharmaceuticals supply chain that relation with their customers, suppliers, materials and information.

Finally, the study would serve as a base line data for other researchers those conducted their study on the same and related topics.

## **1.6 Scope of the Study**

Supply chain management has a wide scope and includes a lot of theories, processes and practices about how to set up the chain yet, this study was not go through details regarding everything include in the term supply chain management practices. The aims for this study only consider assessing the prospect and challenges of customer relationship management, supplier strategic partnership and information sharing of pharmaceuticals SCM practices. The study was confined EPSA Jimma branch as study area of this study. The study was also delimited to the budget and time frame which proposed on this study.

## **1.7 Organization of the Paper**

Generally the paper is organized into five chapters. The first chapter presents background followed by statement of the problem, objective of the study and research question, significance of the study, scope of the study and organization of the paper. The second chapter deals with literature review which shows a review of related topics for the research and conceptual framework of the study with operational definition. The third chapter is a research methodology which includes research design, source population, study population, sample design, data collection instrument and administration, data management, data processing procedures and ethical consideration. The fourth chapter handles data analysis, result and discussion. The fifth chapter wind ups the paper by summarizing the major findings giving conclusion, recommendation , by listing limitation of the study and by giving suggestions for further study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter explains past relevant literature from other researchers who have conducted research in the same field. It contains opinions, attributes, research outcomes and conclusions thereon from previous research work done by other people and organizations. Section 2.1 discusses the theoretical literature/ general overview of the subject matter. Section 2.2 presents the empirical literature. Section 2.3 presents Summary of empirical literature. Section 2.4 presents the framework of the study.

#### ***2.1. THEORETICAL FRAMEWORK***

##### ***2.1.1. SUPPLY CHAIN MANAGEMENT PRACTICE***

Even if the distinction between SCO and SCM made by Mentzer et al. (2001) contributes to a better understanding of the broad SCM field, the SCM definition presented in the previous section is still very vague and therefore needs to be explained and interpreted further. The coordination of intra- and interorganizational functions is considered by most authors as key tasks for SCM. But when Mentzer et al. (2001) state that SCM is about “coordination of the traditional business functions and the tactics across these business functions”, what is then being suggested? This dissertation understands of what SCM in practice means includes the involved companies’ planning and strategy for coordination of their supply chain, including collaboration between functions internally as well as across company borders. Collaboration plays a key role for the coordination and is frequently discussed in SCM literature (Barratt, 2004; Skjoett-Larsen et al., 2003; Simatupang and Sridharan, 2002). In fact, Horvath (2001) argues that Collaboration is a prerequisite to SCM; without collaboration, a SCM environment cannot be achieved, and therefore collaboration becomes important for this dissertation.

Currently, competition in global markets is much greater between supply chains than between enterprises. For this reason, supply chain management has become a critical factor of success for companies. In this context, collective efficiency requires internal and external partner collaboration throughout the supply chain (Friemann and Verhasselt 2012). According to Alam et

al (2012), an effective supply chain must connect the network's members and their respective functions to ensure an uninterrupted flow for balancing supply and demand. To Reiner and Hofmann (2006), the search for improving efficiency has been stimulated not only by companies' individual perceptions, but also throughout the supply chains.

To Chen and Paulraj (2004), the supply chain management construct begins by developing a collaborative advantage, as opposed to Porter's competitive advantage. Likewise, Dyer and Singh (1998) adopt a relational perspective as motivation for obtaining competitive advantage. Therefore, according to Chen and Paulraj (2004), supply chain performance is not affected by a single company, but by the influence of all members in the chain. Thus, one of the tendencies of modern economics is that competition will not remain centralized in firms against firms, but will include supply chains versus supply chains (Lambert et al 1997).

Based on the discussion on supply chain management (Christopher and Ryals 1999; Giunipero et al 2008; Gunasekaran et al 2001; Hendricks and Singhal 2005; Lambert et al 1997; Lee 2002; Li et al 2005; Mentzer et al 2001; McCormack and Lockamy 2004) and the resource-based view, we may say that management practices can offer superior performance to enterprises. Thus, said practices are internal resources and/or competences used to create value (Hayes and Pisano 1994; Hayes and Upton, 1998; Wu et al 2012). As a result, existing competitive differences between companies are explained by how the resources are combined with each other (Barney 1991). In other words, the heterogeneity of practices helps justify the differences in organizations' operational performance (Peteraf and Barney 2003).

SCM practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain. Latest evolution of SCM practices, which include supplier partnership, outsourcing, continuous process flow, and information technology sharing [Zhao, 2009]. Too they use purchasing, quality, and customer relations to represent SCM practices, in their empirical study and include in their list of SCM practices concentration on core competencies, use of inter-organizational systems such as EDI, and elimination of excess inventory levels by postponing customization toward the end of the supply chain. They identify four aspects of SCM practice through factor analysis: supply chain integration, information

sharing, supply chain characteristics, customer service management, geographical proximity and JIT capability. They use supplier base reduction, long-term relationship, communication, cross-functional teams and supplier involvement to measure buyer–supplier relationships [Zhao, 2009].

Someone identify the concept SCM as including agreed vision and goals, information sharing, risk and award sharing, cooperation, process integration, long-term relationship and agreed supply chain leadership. Thus the literature portrays SCM practices from a variety of different perspectives with a common goal of ultimately improving organizational performance. In reviewing and consolidating the literature, five distinctive dimensions, including strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and postponement, are selected for measuring SCM practice. The five constructs cover upstream (strategic supplier partnership) and downstream (customer relationship) sides of a supply chain, information flow across a supply chain (level of information sharing and quality of information sharing), and internal supply chain process (postponement). It should be pointed out that even though the above dimensions capture the major aspects of SCM practice, they cannot be considered complete. Other factors, such as geographical proximity, JIT/lean capability [Croll,2011], cross-functional teams, logistics integration [Tyleca,2011], agreed vision and goals, and agreed supply chain leadership [Wagner,2012] are also identified in the literature. Though these factors are of great interest, they are not included due to the concerns regarding the length of the survey and the parsimony of measurement instruments.

#### ***2.1.1.1. Customer relationship***

CR Comprises the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers, and improving customer satisfaction [Lambert,2000]. someone consider customer relationship management as an important component of SCM practices, as pointed out by them, committed relationships are the most sustainable advantage because of their inherent barriers to competition [Jharkaria,2006]. The growth of mass customization and personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival [Tracey,1999]. Good relationships with supply chain members, including customers, are needed for successful implementation of SCM programs [Jie, 2013]. Close customer relationship allows

an organization to differentiate its product from competitors, sustain customer loyalty, and dramatically extend the value it provides to its customers [Vachon,2001].

Customers have different needs and demands about how they wanted to be treated. Therefore, very seldom organization satisfies the needs of every potential customer in a similar manner. In service contexts, it is often difficult to satisfy targeted groups of customers. Because customers frequently meet and interact with each other and influence fellow customer's perception of the service. Therefore, to manage a good customer relationship organization should deal with the customers in different ways. It is important to have a customer segment to keep in relation to a different targeted group of the customers. It is also important to keep in mind that customers in a relationship with a service provider often want to be recognized and treated individually, even though they are part of a larger segment. In addition, the modern technology available to the firms also supports the individualistic treatment of customers. Direct customer contacts in most of the services give a good starting point for the individual treatment of the customers. (Grönroos 2007, 362.)

On the other hand, it is important to know the need of the customers. To maintain a relationship first of all, the service purchased by customers has to fit the customers. Designing for relationships requires a customer centered approach. Maintaining customer relationship just do not happen accidentally, they are constructed through the service and product provided. Relationships build over to create a loyal customer and loyal customer multiplies the transactions. The relationship infrastructure consists of the building blocks for a business. The components of substructure build on top of each other to create a growing infrastructure. A relationship requires the right blend of the texture and touch. There are some instances where service industry cannot provide sufficient levels to build the relationship. (McDonald & Keen 2000.)

Today, the customer requires flexibility, availability, creativity and price advantages from the service provider. Therefore, new attributes are required for an organization to succeed in a dynamic world where customers wish, customer preferences, customer behavior and loyalties are equally focused (Swift 2001, 29.) Today, in order to maintain a relationship with a customer: "Customers are always right" trend has been highly given importance. According to Kumar and

Petersen (2012), the companies who have implemented the idea of customer relationship management are the most successful ones regardless of their business field. Therefore, managing customer relationships and relationships with other parties require a service oriented culture.

#### ***2.1.1.2. Strategic supplier partnership***

*SSP* Is defined as the long term relationship between the organization and its suppliers. It is designed to leverage the strategic and operational capabilities of individual participating organizations to help them achieve significant ongoing benefits [Peng, 2011].

A strategic partnership emphasizes direct, long-term association and encourages mutual planning and problem solving efforts [Zhao,2009]. Such strategic partnerships are entered into to promote shared benefits among the parties and ongoing participation in one or more key strategic areas such as technology, products, and markets [Lambert,2000].

Strategic partnerships with suppliers enable organizations to work more effectively with a few important suppliers who are willing to share responsibility for the success of the products. Suppliers participating early in the product-design process can offer more cost effective design choices, help select the best components and technologies, and help in design assessment [Jie, 2013].

Strategically aligned organizations can work closely together and eliminate wasteful time and effort [Kroes, 2010]. An effective supplier partnership can be a critical component of a leading edge supply chain [Kromeyer, 2004].

#### ***2.1.1.3. Level & Quality of information sharing***

Information sharing has two aspects: quantity and quality. Both aspects are important for the practices of SCM and have been treated as independent constructs in the past SCM studies [Chau, 1997]. Level (quantity aspect) of information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner [Tan,2002]. Shared information can vary from strategic to tactical in nature and from information about logistics activities to general market and customer information [Slater, 2000].

Many researchers have suggested that the key to the seamless supply chain is making available undistorted and up-to-date marketing data at every node within the supply chain [Lopez, 2011]. By taking the data available and sharing it with other parties within the supply chain, information can be used as a source of competitive advantage [Hsu,2009]. Lee *et. al.* [Li, 2006] considers sharing of information as one of five building blocks that characterize a solid supply chain relationship.

Supply chain partners who exchange information regularly are able to work as a single entity. Together, they can understand the needs of the end customer better and hence can respond to market change quicker. Moreover, someone consider the effective use of relevant and timely information by all functional elements within the supply chain as a key competitive and distinguishing factor. The empirical findings of they reveal that simplified material flow, including streamlining and making highly visible all information flow throughout the chain, is the key to an integrated and effective supply chain. Includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged [Min,2005].

While information sharing is important, the significance of its impact on SCM depends on what information is shared, when and how it is shared, and with whom [Peng,2011]. Literature is replete with example of the dysfunctional effects of inaccurate/delayed information, as information moves along the supply chain [Stock, 2010]. Divergent interests and opportunistic behavior of supply chain partners, and informational asymmetries across supply chain affect the quality of information [Kroes, 2010].

It has been suggested that organizations will deliberately distort information that can potentially reach not only their competitors, but also their own suppliers and customers [Salles, 2010]. It appears that there is a built in reluctance within organizations to give away more than minimal information since information disclosure is perceived as a loss of power. Given these predispositions, ensuring the quality of the shared information becomes a critical aspect of effective SCM [Hall,2000]. Organizations need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion.



### **2.1.2. SCM IN PHARMACEUTICALS INDUSTRIES**

The pharmaceutical industry supply chain according to Whewell (2009), covers drug research, development, manufacture; distribution and application through a range of healthcare services, together with all the ancillary businesses that help these different stages function effectively. Fundamentally, the pharmaceutical industry is a business that is about health and therefore about people. The pharmaceutical and healthcare industry, in the opinion of Whewell (2009), is hugely complex because it involves so many markets, products, processes and intermediaries. It is also globally heavily regulated and used by everyone in life. Changes in one area impact upon the others and environmental factors such as pricing, regulatory change or actions by competitors, impact the whole supply chain in ways that are not easily understood or properly managed.

In the opinion of Ricci (2006), the pharmaceutical industry currently delegates distribution to third-party logistics providers and wholesalers and is less advanced in terms of channel management compared with other sectors. This weak spot in the pharmaceutical industry, he indicated, limits the amount of information about patient demand and product flow that is passed to the manufacturer. This encourages parallel importing from cheaper to more expensive regimes and prevents a company from being able to guarantee the integrity of products after they leave the warehouse. Ricci (2006), indicated that parallel trading costs the pharmaceutical industry billions of dollars each year, but much of that money goes to the importers and pharmacy chains rather than healthcare payers and patients. Most of the imports are repackaged or relabeled, which increases the risk of errors (such as tracing the original source of the product) and makes it more difficult for pharmacists to distinguish imitation from legitimate drugs. Given these problems, he identified the importance of pharmaceutical companies taking control of their own distribution to maximize the potential of the different channels and to protect patients from such errors as mentioned above.

One technique, in the opinion of Ricci (2006), is to deliver the most innovative products straight to retail pharmacies, hospitals, and specialist clinics without using wholesalers. In fact, with repeat prescriptions, drug companies could even supply directly to some patients. Wholesalers, he

indicated, would still have a large role in distributing mass-market drugs with high volumes and could make a far larger contribution by assuming responsibility for packaging such products and managing their distribution on a regional, rather than a national basis.

Alternatively, according to Ricci (2006), companies may choose to manage the funds used to support pharmaceutical distribution and channel management more effectively. By relying on wholesalers to distribute their products and using incentives and bonuses as motivation, pharmaceutical companies can manage the performance of their wholesalers and third-party logistics providers. To do so, he indicated that, pharmaceutical companies must create stronger relationships with retail pharmacies and hospitals that distribute their products and focus on the needs of patients through channel-to-market innovations. If they create strong relationships, companies can expect to control the channels, see margins recover, enjoy better market intelligence, accelerate the point at which sales peak, reduce planning inaccuracies and limit counterfeiting. There are no short cuts and there is no single solution when it comes to building a capable supply chain.

According to Ricci (2006), the scale of change depends on the depth and length of the research and development productivity gap, the pace of technological progress and the length of time needed for management to act. The pharmaceutical supply chain, as he observed, can complicate or enable future growth. The supply chain can be used to accelerate time to market, maximize revenue from new products, block generic competition and protect patients from counterfeit drugs. By engaging in supply chain transformation and adopting an integrated approach to supply chain management, businesses will be able to position themselves to compete in the rapidly changing marketplace. If managed properly, the supply chain can be a significant source of added value to any pharmaceutical company's bottom line.

Cohen et al (2004) identified the disparity in pharmaceutical access between developed and developing countries as stark. He further observed that, developing countries make up approximately 80% of the world's population but only represent approximately 20% of global pharmaceutical consumption. According to Cohen and Illingworth (2003), market failures, government failures and income differences account for this persisting inequity. They also stated

that specifically, high drug costs, weak or corrupt institutions, contributing to less than effective pharmaceutical purchasing and distribution systems and the potential consequences of the Trade Related Aspects of Intellectual Property (TRIPS) Agreement all constrain drug access.

### **2.1.3. Challenges in SCM practices**

(John Storey, Caroline Emberson, Janet Godsell, Alan Harrison, 2006) in their paper “Supply chain management: theory, practice and future challenges” critically assess current developments in the theory and practice of supply management and through such an assessment to identify barriers, possibilities and key trends. The paper reveals that supply management is, at best, still emergent in terms of both theory and practice. The paper identifies the range of key barriers and enablers to supply management and it concludes with an assessment of the main trends.

(Omera Khan, Bernard Burnes, 2007) in their study “Risk and supply chain management: creating a research agenda” develop a research agenda for risk and supply chain management. The paper shows that there are a number of key debates in the general literature on risk, especially in terms of qualitative versus quantitative approaches, which need to be recognized by those seeking to apply risk theory and risk management approaches to supply chains. In addition, the paper shows that the application of risk theory to supply chain management is still in its early stages and that the models of supply chain risk which have been proposed need to be tested empirically. (Mary J. Meixell , Vidyaranya B. Gargeya, 2005), in their paper “Global supply chain design: A literature review and critique” they review decision support models for the design of global supply chains, and assess the fit between the research literature in this area and the practical issues of global supply chain design.

The classification scheme for this review is based on ongoing and emerging issues in global supply chain management and includes review dimensions for (1) decisions addressed in the model, (2) performance metrics, (3) the degree to which the model supports integrated decision processes, and (4) globalization considerations. They conclude that although most models resolve a difficult feature associated with globalization, few models address the practical global supply chain design problem in its entirety. We close the paper with recommendations for future research in global supply chain modelling that is both forward-looking and practically oriented.

A supply chain design problem comprises the decisions regarding the number and location of production facilities, the amount of capacity at each facility, the assignment of each market region to one or more locations, and supplier selection for sub-assemblies, components and materials (Chopra and Meindl, 2004). Experts maintain that global supply chains are more difficult to manage than domestic supply chains (Dornier et al., 1998; Wood et al., 2002; MacCarthy and Atthirawong, 2003).

Substantial geographical distances in these global situations not only increase transportation costs, but complicate decisions because of inventory cost tradeoffs due to increased lead-time in the supply chain. Firms that implement Advanced Planning Systems (APS) may integrate production decisions across the supply chain by including supplier inventory and capacity constraints into their scheduling function, striving to avert supply problems before they occur (Rohde, 2000; Bowersox et al., 2002). These integration practices also affect global supply chain design. Several authors (Dornier et al., 1998; Brush et al., 1999; Trent and Monczka, 2003) discuss the value and need for integration between facilities in the global supply chain. An integrated, well-coordinated global supply chain is difficult to duplicate and so plays an important role in competitive strategy.

## **2.2. EMPIRICAL REVIEW**

Supply chain management practices as a multi-dimensional construct that encompasses upstream and downstream sides of supply chain (Li et al, 2006). Donlon (1996) stated that outsourcing, supplier partnership, information sharing, cycle time, compression and continuous process flow, as a part of supply chain management practices. While Tan et al (1998) represented supply chain management practices in form of quality, purchasing, and customer relationship. Alvarado and Kotzab, in their empirical study focused on supply chain management practices on inter-organizational system used, core competences, and elimination of excess in inventory through postponement.

The key aspect of supply chain management practices according to Tan et al (2002) were supply chain integration, information sharing, customer service management, geographic proximity, and

JIT capabilities. Lee (2004) focused on five practices at supply chain level that are a key to create supply chain responsiveness. They include outsourcing, strategic supplier partnerships, customer relationship, information sharing, and product modularity.

Chen and Paulraj (2004) also conduct the research regarding supply chain management practices; they investigated long-term relationship, cross-functional teams, supplier base reduction, and supplier involvement. The same with Chen and Paulraj, Min and Mentzer (2004) also examined in their study long-term relationship, information sharing, cooperation process integration and supply chain leadership underlying the supply chain management practices. Lie et al (2005,2006); Thatte (2007) identified supply chain management practices in form of strategic supplier partnership, customer relationship, and information sharing. This research adopts the same supply chain management practices (supplier partnership, customer relationship and information sharing). However, this study conducted in Malaysia perspective, especially in consumer goods industry. Li et al (2005); Thatte (2007) have developed a valid and reliable instrument to measure supply chain management practices. The similar instrument also adopted in this research.

The literature also depicts supply chain management practices from different perspectives with goal of improving competitive advantage of firm. By improving competitive advantage of the firm, organization could improve its performance. Three dimensions of supply chain management practices lead to supply chain responsiveness. These are strategic supplier partnership, customer relationship, and information sharing also identified. A supply chain is a network of organizations to perform a variety of processes and activities to generate value in the form of products and services to end consumers. (Christopher, 1992). SCM involves an integrated and process-oriented approach to the management, design and control of the supply chain, with the aim of producing value for the end consumer, by both customer service and reduce cost (Bowersox and Closs, 1996; Giannoccaro and Pontrandolfo, 2002).

The supply chain management has dual purpose, in one side is to improve the performance of an individual organization as well as that of the entire supply chain. In other side the supply chain management reduces organization total cost (Li et al, 2006). Supply chain management (SCM) is

the discipline which is relatively new and lack of theoretical conceptual framework of established or accepted methodology in general. Lambert, *et al.*, (1998) observed that "the term of SCM was originally introduced by consultants in the early 1980s. Since the early 1990s, scholars have attempted to give structure to the development of SCM. Although the short story of this field, but the SCM literature has grown rapidly (Larson and Rogers, 1998).

Shapiro (2001) showed that the SCM combining concepts from different disciplines such as strategic management and theory of the formation of the company; logistics, production and inventory management; accounting management; scientific forecasting and marketing, and operations research. Supply chain management (SCM) is one of business strategy increasingly being used in the business world today and has become the focus of academic attention in recent years (Ballou, Gilbert & Mukherjee, 2000). Because the concept of SCM is still in development, there are several theoretical frameworks and research methodologies need to be developed in the study of SCM (Tage, 1999). However, many articles have been published in various disciplines to try to define the SCM and discuss future directions and the corresponding empirical research methodology (Cooper, *et al.*, 1997; Lambert & Cooper, 2000; Larson & Rogers, 1998; Tage, 1999). According to Lummus and Vokurka (1999) SCM as all activities involved in delivering products from raw material to customer, including sources of raw material and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, delivery to customers and information systems required to monitor all activity.

Bowersox and Closs (1996) showed that to be fully effective in current's competitive business, companies must develop their integrated behavior to incorporated customers and suppliers. This expansion of integrated behaviors, through external integration, referred to by Bowersox and Closs (1996) as supply chain management. The philosophy of supply chain management turns into the implementation of SCM: a set of activities that carries out the philosophy. The set of activities are coordinated effort called supply chain management between the supply chain partners, such as suppliers, manufactures and customers (Greene, 1991). Thatte (2007) stated that strategic supplier partnership as the long-term relationship between the organization and its supplier.

Gunasekaran et al (2001) asserted that a strategic partnership emphasizes long-term relationship between trading partners and promote mutual planning a problem solving efforts. Strategic partnership between organizations promote shared benefits and ongoing collaboration in key strategic areas like technology, products, and market (Yoshino and Rangan, 1995; Thatte, 2007). Strategic partnerships with suppliers lead organization working closely and effectively with a few suppliers rather than many supplier that have been selected on the basis of cost efficient. Many advantage of consisting supplier early in the product-design process are that suppliers can offer cost effective design alternative, assist in selecting better components and technologies, and aid in designing assessment (Tan et al, 2002; Thatte, 2007).

In supply chain management strategies, supplier relationship activities play an important role (Wisner, 2003). Long-term relationships refer to intention that the arrangement is not going to be temporary (Chen and Paulraj, 2004). Through close relationship supply chain partners are willing to share risks and reward, and maintain the relationship on long term basis (Landeros and Monczka, 1989; Cooper and Ellram, 1993; Stuart, 1993; Thatte, 2007). Toni and Nassimbeni (1999) identified that a long-term perspective between the buyer and supplier increase the intensity of firm-supplier integration. Firms that integrate with customers including: planning, implementing, and evaluating a successful relationship between the provider and recipient of both upstream and downstream of the supply chain.

Therefore, customer relationship management (CRM) is not only focused on inbound customer relationships but also on outbound customer relationships in SCM. Customer relations related to the company's ability to communicate to the delivery of appropriate products and services to customers locally and globally in the right time, right place, and appropriate of quantity and quality. Customer linkage especially sharing product information with customers, receiving customer orders, interact with customers to manage demand, after placing the order system, share the status of orders with customers on scheduling orders, and product delivery stage (Lee, *et al*, 2007).

A firm's customer relationship practices can generate the organizational success in supply chain management practices efforts as well as its performance (Scott and Westbrook, 1991; Ellram, 1991; Turner, 1993). The success of supply chain management encompasses customer integration at the downstream and supplier integration at the upstream, considering that each entity in a supply chain is a supplier as well as a customer (Tan et al., 1999; Thatte, 2007). In the competitive business, better relationship management with customers is crucial for organization success (Wines, 1996). Good relationship with business partners, including key customers are important role to success of supply chain management practiced by organization (Moberg et al, 2002; Tathee, 2007). Customer relationship recognized as an internal component of an organization's market strategy to increase sales and profits (Bommeret, 2001; Thatte, 2007).

Close customer relationship allow product differentiation from competitors, help sustain customer satisfaction and loyalty, and elevated the value provide to customer (Margaretta, 198; Thatte, 2007). Simatupang and Sridharan, (2002) defined information sharing as the access to private data between business partners thus enabling them to monitor the progress of products and orders as they pass through various processes in the supply chain. They identified some of element that comprise information sharing, consisting data acquisition, processing, storage, presentation, retrieval, and broadcasting of demand and forecast data, inventory status and location, order status, cost-related data, and performance status. They also add that information sharing pertaining to key performance metric and process data improves the supply chain visibility thus enabling effective decision making. Information shared in a supply chain is of use only if it is relevant, accurate, timely, and reliable (Simatupang and Sridharan, 2005;Tathee, 2007).

Information sharing with business partners enables organizations making better decisions and making action on the basis of greater visibility (Davenport, et al, 2001; Tathee, 2007). Lumnus and Vokurka (1999, cited in Thatte, 2007) stated that in order to make the supply chain competitive, a necessary first step is to acquire a clear understanding of supply chain concepts and be willing to openly share information with supply chain partners. In business competitive world nowadays, business organization should to develop their supply chain in order to get customer responses.



According to Thatte, (2007) the sub-constructs for supply chain responsiveness includes operation system responsiveness, logistic process responsiveness and supplier network responsiveness. Operation system responsiveness is the ability of firm's manufacturing system to address changes in customer demand. Its includes both manufacturing and service operation. Duclos et al (2003); Lumnus et al (2003) emphasize that responsiveness at each company of the chain is an integral component of supply chain responsiveness. Logistic process responsiveness is the ability of company's outbound transformation, distribution and warehousing system to address changes in customer demand.

Fawcett (1992) stated that the responsive in logistic process is a crucial component in the supply of a responsive supply chain strategy. Logistics and distribution management encompasses the transformation activities of goods from suppliers to manufacturer to distribution centers to final point of end users (Ricker and Kalakota, 1999; Duclos et al, 2003; Thatte, 2007). These activities include warehousing, packaging and shipping, transportation planning and management, management inventory, reserve logistics and order tracking and delivery. Supplier network responsiveness is the ability of the firm's major suppliers to address changes in the firm's demand. A key to responsiveness is the presence of responsive and flexibility partners upstream and downstream of the firm (Christopher and Peck, 2004).

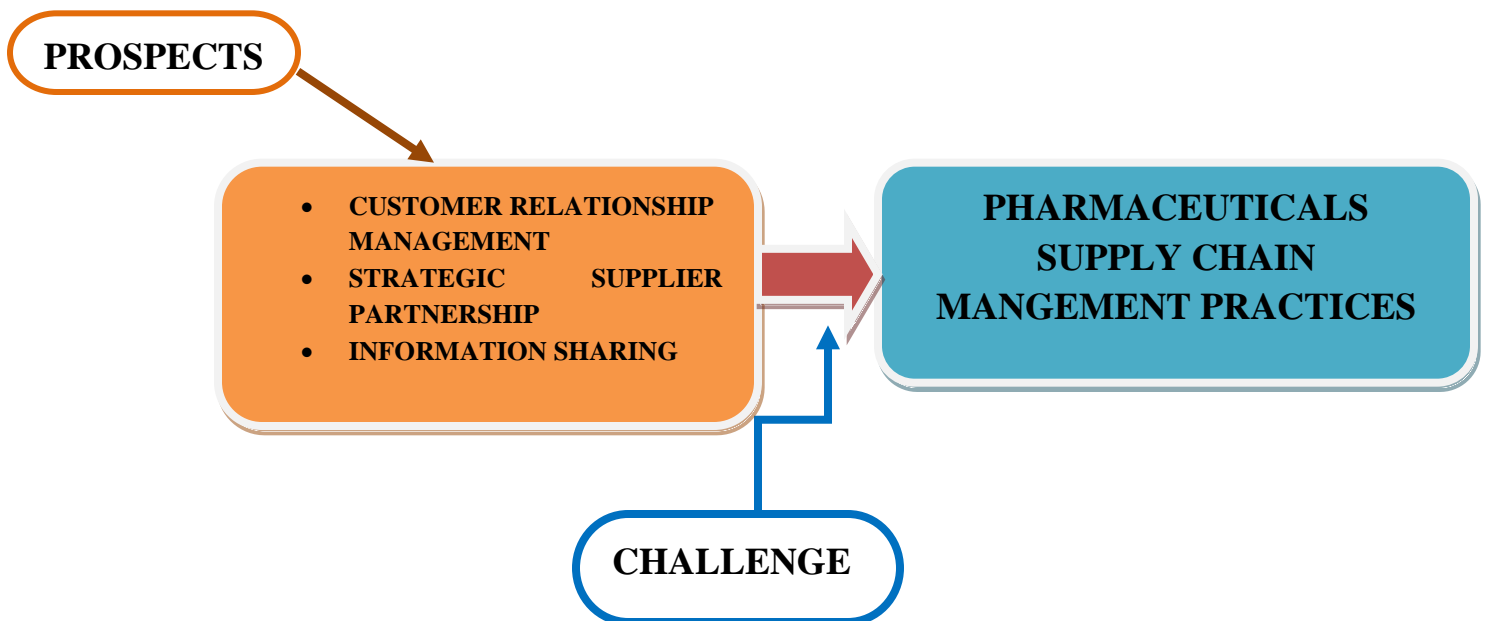
The ability of the firms to react quickly to customer demand is depending on the reaction time of suppliers to make volume of changes. In the changing world, competitive advantage emerges from the creation of supplier competencies to create customer value and achieve cost and/or differentiation advantages, resulting in market share and firm profitability (Barney, 1991; Coyne, 1986; Day and Wensley, 1988; Prahalad and Hamel, 1990, Thatte, 2007). To obtain competitive advantage, firms need to set up barriers that make imitation difficult through continual investment to improve the firm advantage, making this a long-run cyclical process (Day and Wensley, 1988; Thatte, 2007).

Souza and William (2000) suggested that cost and quality is a part of competitive advantage dimension. Wheelwright (1978) and Thatte (2007) also suggested cost, quality, dependability

and speed of delivery as some of the critical competitive priorities for manufacturing. (Vokurka et al., 2002; Fawcett and Smith, 1995; White, 1996; Skinner, 1985; Roth and Miller, 1990; Tracey et al., 1999, Thatte, 2007) described the competitive advantage dimensions included price/cost, quality, delivery dependability, and time to market. (viz: Stalk, 1988; Vesey, 1991; Handfield and Pannesi; 1995, Kessler and Chakrabarti, 1996; Zhang, 2001). Koufteros et al. (1997); describe the following five dimensions of competitive capabilities: competitive pricing, premium pricing, value-to-customer quality, dependable delivery, and product innovation. Thatte (2007) suggested that dimension of competitive advantage: price, quality, delivery dependability, time to market, and product innovation. One of the most effective supply chain practices is to create a lasting partnership with suppliers long after signing a deal. However, to completely maximize this relationship, it must be a two-way communication where both the seller and buyer are actively managing the relationship. With a good alliance management system in place, it will be easier to capitalize on your buyer/supplier relationship to ensure sustained value and constant improvement.

### 2.3. Conceptual Framework

Based on the above literature review, the following research framework can be drawn



**Fig 1: Conceptual Framework, prepared by the researcher**

## **CHAPTER: THREE**

### **3. RESEARCH design and Methodology**

In this study the research design and methodology section was discussed about the research design, sample and sampling technique, target population, sample size, unit of analysis, participants, research instruments, source of data, data collection methods, development of the instrument, data analysis tools, validity and reliability test approaches.

#### **3.1. Description of the Study Area**

The study was conducted on EPSA Jimma branch, which found in Jimma town. EPSA Jimma Hubs is located in Jimma town to south western direction of Ethiopia, which is located 330 Km away from the capital, Addis Ababa. It is the key governmental organization for the implementation of IPLS and distribution of essential health commodities (RDF and Program) for public and private health facilities found in 9 zones ,2 Special woredas and 1 Town Administration. It also provides supervisory, material support and Capacity building to health facilities for strengthening and enforces the implementation of IPLS and pharmacy service. Currently the hub has been serving a total of 334 public health facilities.

#### **3.2. Research Design**

A descriptive Cross-sectional survey design was employed in this study. Descriptive survey as described by Kothari, Sabino& Zach (2005) is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way. Mugenda and Mugenda(1999) define survey as a strategy used to collect information from a large population by use of structured interviews, questionnaires among other methods. This research was design which is suitable for this study because it is an efficient way of collecting information from a selected number of respondents being targeted from a given population. Cross-sectional studies were involve data collection from a population, or a selected subset, at one specific point in time (Cooper & Schindler, 2006). Cross-sectional surveys have been used in previous studies dealing with reverse logistics including Serut (2013).

### 3.3. Research Approach

The study was used both quantitative and qualitative research approaches. This is because the study primarily focused on the data collected through questionnaires to give condensed pictures of the data by using SPSS for inferential statistics. And also the study was used qualitative approach for descriptive findings with word impression and texts.

### 3.4. Unit of analysis

The target populations were employees who work within the lines of supply chain of the agency are 112. The unit of analysis of the study was including employees who work at the different departments of the EPSA Jimma branch along with the line of supply chains.

### 3.5. Sample Design and Procedures

A representative sample for questionnaire was selected from the employees of the agency based on probability sampling of proportional stratified simple random sampling. Stratified sampling was employed based on the strata of the departments and simple random sampling using random table was done accordingly. The reason for using stratified simple random sampling is that first, we can have more precise information inside the sub-population about the variables we are studying. And second, we can raise precision of the estimate of the variables of the whole population.

According to Taro Yamane's (1973), this study was applied a simplified formula to determine the required sample size at 95% confidence level, and allowable error = 0.05% and number of employees who work within the lines of supply chain of the enterprise are 112.

$$n = \frac{N}{1 + N(e)^2}$$

Where 'n' is the sample size, N is the total number of employees in the factory, and 'e' is the level of precision.

Substitute numbers in formula:

$$n = \frac{112}{1 + 112(0.05)^2}$$

$$n = 87.5 \approx 86$$

After calculating the sample size by substituting the numbers into the Yamane formula, the numbers of sample is **86**. In order to increase the response rate, the researcher has increased the sample size to **95** (by adding ten percent of the sample size) persons.

**Table 3.1: sample size**

<b>Department</b>	<b>No of employees</b>	<b>Percentage (%)</b>	<b>Number selected</b>	<b>Round up number Respondents</b>
Warehouse & Inventory Management	27	84.8	22.89	23
Distribution & Fleet management	20	84.8	16.96	17
General service	26	84.8	22.048	22
Forecasting & Capacity building	13	84.8	11.024	11
Fund administration	26	84.8	22.048	22
<b>TOTAL</b>	<b>112</b>	<b>84.8</b>	<b>94.98</b>	<b>95</b>

According to the above formula given above, 95 employees became a representative samples for the study. This study considers permanent employees of the company which were selected using simple random sampling.

### **3.6. Data Source and Method of Collection**

Both primary and secondary data collection approaches was used to conduct this study. Primary data was collected by interviewing the staff's from selected samples and questionnaire was distributed for selected sample of the branch staffs. Secondary data was collected through books,

journals and desk research to clarify most of the issues. A personal delivery and pickup methods was used to improve the return of the questionnaires from study participants. Moreover covering letter [was attached](#) to each questionnaire to introduce the research objectivity and confidentiality to the study participants.

The Likert-type scale method was used to from the range of responses: strongly disagree, disagree, Neutral, Agree, and strongly agree, with a numeric value of 1-5, respectively. The usage of this particular scaling method ensured that the research study illustrated the ability to assess the responses and measure the responses quantifiably. So that a pattern or trend may be produced in order to answer the research questions. As Neuman (2003) explained, it is a process of asking many people the same questions and examining their answers research questions.

### **3.7. Methods of Data Analysis**

The data was obtained through questionnaire was first edited for their completeness, categorized, registered. Based on this the data was analyzed using descriptive statistical analysis techniques. Descriptive statistics provide simple summaries about the sample and about the observations that have been made. Such summaries may be either quantitative, i.e. summary statistics, or visual, i.e. simple-to-understand graphs. These summaries may either form the basis of the initial description of the data as part of a more extensive statistical analysis, or they may be sufficient in and of themselves for a particular investigation. With regards to the descriptive analysis the study was analyzed using mean and standard deviation.. The study was used SPSS version 20 software package in the entire analysis part.

### **3.8. Reliability and Validity of Data**

The reliability was ensured by testing the instruments for the reliability of values (Alpha values) as recommended by Cronbatch, (1946). Cronbatch recommends analysis for Alpha values for each variable under study. According to Sekaran 2001 Alpha values for each variable under study should not be less than 0.6 for the statements in the instruments to be deemed reliable. Consequently, all the statements under each variable were subjected to this test and prove to be above 0.6. A measure is reliable when it is error free and consistent across time and across various items in the instrument. The validity of the data collection instruments were done with

the help of an expert to edit the questionnaire and the interview guide. The researcher was forward the questionnaire and the interview guide to supervisor who is an expert in the area covered by the research for editing and reviewing.

**Table 3.2: Reliability analysis**

	N of Items	Cronbach's Alpha
Customer Relationship Management	7	.831
<b>STRATEGIC SUPPLIER PARTNERSHIP</b>	5	.743
<b>INFORMATION SHARING</b>	5	.897
Challenges of Pharmaceuticals Supply chain management practices	7	.815

The reliability of the survey variables were initially tested before the hypothesis theory mentioned in previous work was verified. Firstly, in accordance with the work of (Thompson et al, 2017), The Cronbach's  $\alpha$  used in this study for the dimensions of each construct is higher than the critical value of 0.7, as proposed by (Nunnally, 1978), indicating that the internal consistency of the scale used in this research is excellent.

### ***3.8 Ethical Consideration***

For this study permission letter was forwarded from JU, BECO to EPSA Jimma branch. Then principal investigator was communicate the objective of the study with the supply chain, department head and pharmaceuticals distribution and fleet management and warehouse and inventory management teams. After getting consent from the management data collection will be started. And was informing to each respondent that the information that was collect will be kept confidential.

# CHAPTER FOUR

## FINDINGS AND DISCUSSIONS

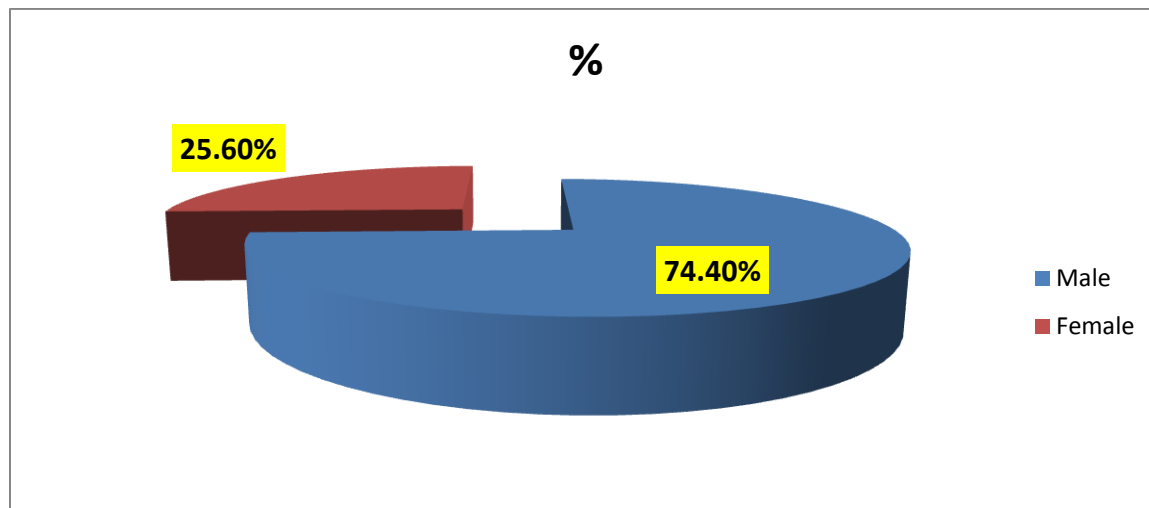
This chapter contains the presentation, analysis and interpretations of data. The statistical techniques that were outlined in chapter three were applied to the data, and the results obtained are presented in this chapter. The first part describes the demographic characteristics of respondents in terms of sex, age group, and education level and service years.

In the second part the analysis and interpretation of data gathered through questionnaire were discussed descriptions of the variables with their mean and standard deviation values.

### *4.1. Findings of Demographic Analysis*

The study sought to collect data from 95 staff's of EPSA Jimma branch but the researcher managed to collect 88 questionnaires. This represents a response rate of 92.6 percent which is very good for analysis. According to Babbie (2004) a response rate of 60 percent is good and that of 90.5 percent is very good.

**Figure 4.1: Sex distribution of Respondents**



*Source, survey, 2020*

As indicated the information above on figure 4.1, concerning sex wise distribution of respondents' larger proportion of respondents 74.4% were male whereas the remaining 25.6% were female. From this we can conclude that the proportion of male employees higher than



female employees in EPSA Jimma\_branch. The whole year, along with sporadic OT hours during peak season, the less number of female staff may favor it to minimize maternity day-offs impact on the service.

<b>Table 4.1: Age of respondents</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<25years	9	10.2	10.2	10.2
	25-30years	23	26.1	26.1	36.3
	31-35years	43	48.9	48.9	85.2
	36-40years	13	14.8	14.8	100.0
	Total	88	100.0	100.0	

*Source, survey, 2020*

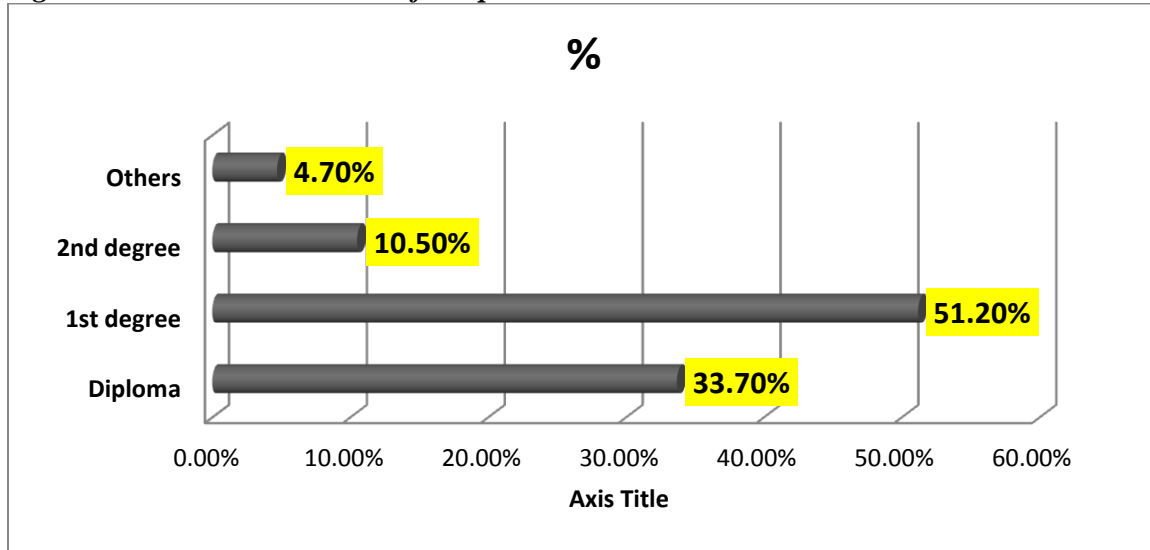
According to the information observed above on table 4.1, Concerning the respondents percentage distribution by age category the study found that larger proportion (48.9%) of the agency staff's in the study area were aged between 31 and 35 years followed by 26.1 percent of the staff's aged between 25 and 30, 14.8 percent were in between 36-40 years. The remaining least group 10.2 percent of the respondents indicated that they were <25 years. This suggests that most respondents have at their productive and maturity age which is essential for efficiency of the operational task of the agency.

<b>Table 4.2: Work experience in the agency (in years)</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<3years	16	18.2	18.2	18.2
	3-5years	24	27.3	27.3	45.5
	6-10years	36	40.9	40.9	86.4
	>10years	12	12.6	12.6	100.0
	Total	88	100.0	100.0	

*Source, survey, 2020*

As indicated on the above table, respondents work experience which revealed this study showed that, larger proportion 40.9 % of the participants were served for 6-10 years followed by, 27.3 % were serve for 3-5 years and 18.2 % were include respondents those serve <3 years and the remaining least group 12.6% were served for more than 10 years. This could show that as the participants experienced enough to provide information for this study.

**Figure 4.2: Educational level of Respondents**



*Source, survey, 2020*

In relation to respondents’ educational level, as indicated on figure 4.2, the result showed that larger proportion 51.20% of the respondents were hold their first degree followed by 33.7% were possessed diploma 10.50% were had the 2<sup>nd</sup> degree the remaining least group 4.7% were found in others educational level status. This implies that most of the agency staff’s found at their degree level. Thus, they had been qualified enough and had a potential to evaluate the agency’s reverse logistic practices and the challenges which the practiced faced.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	WIM	26	29.5	29.5	29.5
	Distribution	16	18.2	18.2	47.7
	Forecasting	9	10.2	10.2	57.9
	General service	19	21.6	21.6	79.5
	Fund administration	18	20.5	20.5	100.0
	Total	88	100.0	100.0	

*Source, survey, 2020*

According to the information observed above on table 4.3, regarding respondents' department of work, the result showed that a larger proportion of 29.5% were from WIM, followed by 21.6% from general service, 20.5% from fund administration, 18.2% from distribution, and the remaining 10.2% were serving at the forecasting department. This implies that employees were selected proportionally from each department of the agency. This could be logical to collect data at different insights from different departments of the agency.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Warehouse manager	18	20.5	20.5	20.5
	Dispatcher	9	10.2	10.2	30.7
	Officer	32	36.4	36.4	67.1
	Delivery personnel	9	10.2	10.2	77.3
	Team leaders	8	9.1	9.1	86.4
	Others	12	13.6	13.6	100.0
	Total	88	100.0	100.0	

*Source, survey, 2020*

The study sought to find the agency staff's positions and responsibilities. The results indicated that a larger proportion of respondents, 36.4%, were officers from different departments, followed by 20.5% and 13.6% of focal warehouse managers and others, respectively. The least proportion, 9.1%, were team leaders (see Table 4.4 above). The above findings could suggest that the participants of the study were found at their different titles and responsibility holdings.

level. Thus, they could be able to evaluate the agency's reverse logistic practices very from different angles with a varied insight of the participants.

#### ***4.2. Descriptive Analysis of EPSA Jimma branch Prospects of Pharmaceuticals Supply Management Practices***

The descriptive statistics utilized are based on frequency tables to provide information on the demographic variables. Through tables, summary statistics such as means, standard deviations, minimum and maximum are computed for each prospect of supply chain management practices in this study. The findings which identified on this study presented as follows.

Mesfin (2016) used a kind of rule of thumb to create equal intervals for a range of five points Likert scale (that ranges from strongly disagree to strongly agree in the survey questionnaire). A calculated mean value that ranges from 1 to 1.80 implies strong disagreement, a mean range from 1.81 to 2.6, from 2.61 to 3.4, from 3.41 to 4.2 and from 4.21 to 5.00 represented respondents' perceptions of somewhat disagree, neutral, somewhat agree and strongly agree respectively. The 0.8 served as a boundary for each elements of the measurement in the questionnaire.

Accordingly, the 0.8 was a result found by dividing the difference between the maximum (5) and minimum (1) scores to the maximum score (5) of the questionnaire. In the process of examining of the data, standard deviation was used. Small standard deviations (relative to the value of the mean itself) indicate that data are close to the mean whereas a large standard deviation (relative to the mean) indicates that the data points are distant from the mean. The mean is a poor fit of the data. Standard deviation is a measure of how well the mean represents the data (Field 2009). All of the variables were measured using a five point likert scale where 1 stands for Strongly Disagree and 5 stands of Strongly Agree. Therefore the interpretation made using the mean of each variable, as a matter of fact the mean falls between the two ranges, hence if the mean approaches to 1 the interpretation would be the respondents didn't agree on the raised issue or variable and if it approaches to 5 the reverse would be true.

#### 4.2.1. Customer Relationship Management

CR Comprises the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers, and improving customer satisfaction [Lambert,2000]. The findings on the prospects of customer relationship management of EPSA Jimma presented as shown below;

	N	Mean	Std. Deviation
The agency could able to satisfy the pharmaceuticals need of its customers	88	3.99	1.193
The agency could able to satisfy the needs every potential customers in similar manner	88	3.37	1.555
The agency deal with its customer in different ways	88	3.94	1.099
The agency had a customer segment to keep its potential customers relationship	88	3.39	1.492
The modern technology available to the agency also supports the individualistic treatment of customers	88	3.51	1.317
To maintain a relationship first of all, the service purchased from the agency by customers has fit the customers.	88	3.55	1.316
The agency had good service oriented culture for its customer relationship management	88	3.63	1.235

*Source, survey, 2020*

Table 4.5.; represents the calculated means and standard deviations for the customer relationship management practices at EPSA Jimma branch. The result showed that the means and standard deviations of the agency could able to satisfy the pharmaceuticals need of its customers ( $m=3.99$ ,  $SD=1.193$ ), the agency deal with its customer in different ways ( $m=3.94$ ,  $SD=1.099$ ), the modern technology available to the agency also supports the individualistic treatment of customers ( $m=3.51$ ,  $SD=1.317$ ), To maintain a relationship first of all, the service purchased from the

agency by customers has fit the customers ( $m=3.55, SD= 1.316$ ) and The agency had good service oriented culture for its customer relationship management ( $m=3.63, SD=1.235$ ), which the means for the above indicated statements found in the range of 3.41-4.2 which mean the average number of respondents were tend to agree on the above indicated statements. This indicate that EPSA Jimma branch have able to satisfy the pharmaceuticals needs of its customers, the agency could deal with its customers in different ways as the real data indicates the agency take a role with a facilities catchment review meeting, regional forum and also in a zonal task force to deal with its customers. This might contribute the agency operational success. A firm's customer relationship practices can generate the organizational success in supply chain management practices efforts as well as its performance (Scott and Westbrook, 1991; Ellram, 1991; Turner, 1993). The success of supply chain management encompasses customer integration at the downstream and supplier integration at the upstream, considering that each entity in a supply chain is a supplier as well as a customer (Tan et al., 1999; Thatte, 2007).

In a similar vein the findings also implies that the technology manipulated by the agency could support the individuals' treatments of customers. This indicates customers easily access services with a technological aid. This might be fastening than traditional ways of services. The result also indicates that the service provision of the agency could fit the customer needs. This indicates that the customers' achievement of fulfilling what its customer wants to get. This could enhanced/strengthen the relationship found between them. Additionally, the agency had provided good service oriented culture as a recognition for its customer. In the competitive business, better relationship management with customers is crucial for organization success (Wines, 1996). Good relationship with business partners, including key customers are important role to success of supply chain management practiced by organization (Moberg et al, 2002; Tathee, 2007).

However, the mean values for the agency could able to satisfy the needs every potential customer in similar manner and the agency had a customer segment to keep its potential customers relationship were 3.37 and 3.39 respectively which are found in a range of 2.61-3.4 which mean most of the study participants were not sure/ failed to agree of disagree on the statements. This indicates that it has not convincing the agency capability to satisfy the needs of every potential customer in similar manner and the agency for having a customer segment to keep its potential customers.

#### 4.2.2. Strategic Supplier Partnership

A strategic partnership emphasizes direct, long-term association and encourages mutual planning and problem solving efforts [Zhao,2009]. Such strategic partnerships are entered into to promote shared benefits among the parties and ongoing participation in one or more key strategic areas such as technology, products, and markets [Lambert,2000]. The findings regarding SSP presented as shown below;

	N	Mean	Std. Deviation
The agency had set mutual planning with its suppliers	88	3.89	1.195
The agency closely aligned with the suppliers to work together with economical time	88	3.57	1.355
The agency partnership with the suppliers promote shared benefits	88	3.74	1.199
The agency long term partnership with the suppliers	88	3.59	1.292
Suppliers of the agency willing to share the responsibility of the products	88	3.71	1.217

*Source, survey, 2020*

Table 4.6.; represents the calculated means and standard deviations for the strategic supplier partnership practices at EPSA Jimma branch, the descriptive values of the agency had set mutual planning with its suppliers, The agency closely aligned with the suppliers to work together with economical time, The agency partnership with the suppliers promote shared benefits, The agency long term partnership with the suppliers and Suppliers of the agency willing to share the responsibility of the products were (m=3.89, SD=1.195),(m=3.57, SD=1.355), (m=3.74, SD=1.199), (m=3.59, SD=1.292), and (m=3.71, SD=1.217), have been developed a mutual plan with its partners, the agency could able to work in collaboration with its partners on efficient time, the agency partnership with the suppliers favored shared benefits, it aligned a sustainable partnership with the suppliers and with the suppliers the agency shared the responsibility of the products. In supply chain management strategies, supplier relationship activities play an important role (Wisner, 2003). Long-term relationships refer to intention that the arrangement is

not going to be temporary (Chen and Paulraj, 2004). Through close relationship supply chain partners are willing to share risks and reward, and maintain the relationship on long term basis (Landeros and Monczka, 1989; Cooper and Ellram, 1993; Stuart, 1993; Thatte, 2007). Toni and Nassimbeni (1999) identified that a long-term perspective between the buyer and supplier increase the intensity of firm-supplier integration. Firms that integrate with customers including: planning, implementing, and evaluating a successful relationship between the provider and recipient of both upstream and downstream of the supply chain.

### 4.2.3. Information Sharing

Level (quantity aspect) of information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner [Tan,2002]. Shared information can vary from strategic to tactical in nature and from information about logistics activities to general market and customer information [Slater, 2000]. Concerning the agency information sharing practices the finding presented as shown below;

<b>Table 4.7: Descriptive Statistics of Information sharing of EPSA Jimma Branch</b>			
	N	Mean	Std. Deviation
The agency efficiently share information with its partners	88	3.94	1.125
The agency up to date information of its supply chain status data	88	4.02	0.954
The agency has been used relevant information for decision making	88	3.88	1.019
The agency share information from its partners to forecast the pharmaceuticals demand of the customers	88	3.99	1.002
The agency evaluate the information which shared from the partners to prevent the bullwhip effect on its supply chain	88	3.81	1.117

*Source, survey, 2020*

According to the information observed above on table 4.7, concerning the information sharing of the agency the result showed that the mean values for the agency efficiently share information with its partners, the agency up to date information of its supply chain status data, The agency has been used relevant information for decision making, The agency share information from its



partners to forecast the pharmaceuticals demand of the customers and The agency evaluate the information which shared from the partners to prevent the bullwhip effect on its supply chain were ( $m=3.94$ ,  $SD=1.125$ ), ( $m=4.02$ ,  $SD=0.954$ ), ( $m=3.88$ ,  $SD=1.019$ ), ( $m=3.99$ ,  $SD=1.002$ ), and ( $m=3.81$ ,  $SD=1.117$ ), respectively which all the means found in the range of 3.41-4.2 which average number of the respondents were tend to agree on the above strategic supplier partnership practices. These imply that the agency had been efficiently share information with the partners, its supply chain status supported with up to date information, relevant information utilized for decision making, reliable information utilized for demand forecasting and the shared information have been evaluated to tackle any distortion. Information sharing with business partners enables organizations making better decisions and making action on the basis of greater visibility (Davenport, et al, 2001; Tathee, 2007). Lumnus and Vokurka (1999, cited in Thatte, 2007) stated that in order to make the supply chain competitive, a necessary first step is to acquire a clear understanding of supply chain concepts and be willing to openly share information with supply chain partners. Thus, The agency have been practiced better decision making, and also had clear description of its supply chain status.

### **4.3. Challenges of EPSA Jimma Branch Supply Chain Management Practices**

Supply chain management: theory, practice and future challenges” critically assess current developments in the theory and practice of supply management and through such an assessment to identify barriers, possibilities and key trends. Here, in this section the paper was presented the challenges/barriers which EPSA Jimma branch faced on its supply chain management practices.

<b>Table 4.8: Descriptive Statistics of Challenges of SCMPs of EPSA Jimma Branch</b>			
	N	Mean	Std. Deviation
The agency had a competitive challenge on its operations	88	3.64	1.165
Man power skills is one of the challenges of the agency on its SCM practices	88	3.12	1.647
Vital product availability is a challenge for SCMPs of the agency	88	3.94	1.009
Technology is a challenge for SCMPs of the agency	88	3.78	1.103
Pharmaceuticals products price is a challenge for SCMPs of the agency	88	2.31	2.342
Human power is a challenge for SCMPs of the agency	88	3.59	1.142
Personal resources is a barrier for the facility implementing Good SCMPs	88	3.81	1.117

**Source, survey, 202**

In relation to the challenges of supply chain management practices the finding showed that the means of the agency had a competitive challenge on its operations, Vital product availability is a challenge for SCMPs of the agency, technology is a challenge for SCMPs of the agency, Human power is a challenge for SCMPs of the agency and Personal resources is a barrier for the facility implementing Good SCMPs were ( $m=3.64$ ,  $SD=1.165$ ), ( $m=3.94$ ,  $SD=1.009$ ), ( $m=3.78$ ,  $SD=1.103$ ), ( $m=3.59$ ,  $SD=1.142$ ), and ( $m=3.81$ ,  $SD=1.117$ ), respectively which all the means found in the range of 3.41-4.2 which average number of the respondents were tend to agree on the above strategic supplier partnership practices. These imply that competitiveness, vital product availability, technology, human power and personal resources have been challenges of EPSA Jimma branch through its supply chain management practices. These challenges might be exert a great pressure on the performance and quality of the supply chain management practices. However the mean values of Man power skills is one of the challenges of the agency on its SCM practices ( $m=3.12$ ,  $SD=1.647$ ) the mean value found in the range 2.61-3.4 which average number of the respondents were not surely responded they were prefer neutral response, whereas the mean value of Pharmaceuticals products price is a challenge for SCMPs of the agency ( $m= 2.31$ ,

SD=2.342) which the cut points found in 1.6-2.4 which most of the respondents were disagree on the issue. This imply that the skill of manpower status was unknown to be a challenge, but the pharmaceuticals price of the agency could not be a challenge, since it was affordable to its customers.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1. Summary

Based on the analyzed data and identified findings of this study the researcher could able to summarize the following major findings;

The study sought to collect data from 95 staff's of EPSA Jimma branch but the researcher managed to collect 88 questionnaires. This represents a response rate of 92.6 percent which is very good for analysis.

Concerning sex wise distribution of respondents' larger proportion of respondents 74.4% were male whereas the remaining 25.6% were female. From this we can conclude that the proportion of male employees higher than female employees in EPSA Jimma branch.

Concerning the respondents percentage distribution by age category the study found that larger proportion (49.5 %) of the agency staff's in the study area were aged between 31 and 35 years followed by 24.4 percent of the staff's aged between 25 and 30, 15.1 percent were in between 36-40 years. The remaining least group 10.5 percent of the respondents indicated that they were <25 years.

The calculated means and standard deviations for the customer relationship management practices at EPSA Jimma branch. The result showed that the means and standard deviations of the agency could able to satisfy the pharmaceuticals need of its customers ( $m=3.99$ ,  $SD=1.193$ ), the agency deal with its customer in different ways ( $m=3.94$ ,  $SD=1.099$ ), the modern technology available to the agency also supports the individualistic treatment of customers ( $m=3.51$ ,  $SD=1.317$ ), To maintain a relationship first of all, the service purchased from the agency by customers has fit the customers ( $m=3.55$ ,  $SD=1.316$ ) and The agency had good service oriented culture for its customer relationship management ( $m=3.63$ ,  $SD=1.235$ ), which the means for the above indicated statements found in the range of 3.41-4.2 which mean the average number of respondents were tend to agree on the above indicated statements.

In a similar vein the findings also implies that the technology manipulated by the agency could support the individuals' treatments of customers. This indicates customers easily access services with a technological aid. This might be fastening than traditional ways of services. The result also indicates that the service provision of the agency could fit the customer needs. This indicates that the customers' achievement of fulfilling what its customer wants to get. This could enhanced/strengthen the relationship found between them. Additionally, the agency had provided good service oriented culture as a recognition for its customer.

The descriptive values of the agency had set mutual planning with its suppliers, The agency closely aligned with the suppliers to work together with economical time, The agency partnership with the suppliers promote shared benefits, The agency long term partnership with the suppliers and Suppliers of the agency willing to share the responsibility of the products were ( $m=3.89$ ,  $SD=1.195$ ), ( $m=3.57$ ,  $SD=1.355$ ), ( $m=3.74$ ,  $SD=1.199$ ), ( $m=3.59$ ,  $SD=1.292$ ), and ( $m=3.71$ ,  $SD=1.217$ ), have been developed a mutual plan with its partners, the agency could able to work in collaboration with its partners on efficient time, the agency partnership with the suppliers favored shared benefits, it aligned a sustainable partnership with the suppliers and with the suppliers the agency shred the responsibility of the products.

Concerning the information sharing of the agency the result showed that the mean values for the agency efficiently share information with its partners, the agency up to date information of its supply chain status data, The agency has been used relevant information for decision making, The agency share information from its partners to forecast the pharmaceuticals demand of the customers and The agency evaluate the information which shared from the partners to prevent the bullwhip effect on its supply chain were ( $m=3.94$ ,  $SD=1.125$ ), ( $m=4.02$ ,  $SD=0.954$ ), ( $m=3.88$ ,  $SD=1.019$ ), ( $m=3.99$ ,  $SD=1.002$ ), and ( $m=3.81$ ,  $SD=1.117$ ), respectively which all the means found in the range of 3.41-4.2 which average number of the respondents were tend to agree on the above strategic supplier partnership practices. These imply that the agency had been efficiently share information with the partners, its supply chain status supported with up to date information, relevant information utilized for decision making, reliable information utilized for demand forecasting and the shared information have been evaluated to tackle any distortion.

In relation to the challenges of supply chain management practices the finding showed that the means of the agency had a competitive challenge on its operations, Vital product availability is a challenge for SCMPs of the agency, technology is a challenge for SCMPs of the agency, Human power is a challenge for SCMPs of the agency and Personal resources is a barrier for the facility implementing Good SCMPs were (m=3.64, SD=1.165), (m=3.94, SD=1.009), (m=3.78, SD=1.103), (m=3.59, SD=1.142), and (m=3.81, SD=1.117), respectively which all the means found in the range of 3.41-4.2 which average number of the respondents were tend to agree on the above strategic supplier partnership practices.

However the mean values of Man power skills is one of the challenges of the agency on its SCM practices (m=3.12, SD=1.647) the mean value found in the range 2.61-3.4 which average number of the respondents were not surely responded they were prefer neutral response, whereas the mean value of Pharmaceuticals products price is a challenge for SCMPs of the agency (m= 2.31, SD=2.342) which the cut points found in 1.6-2.4 which most of the respondents were disagree on the issue. This imply that the skill of manpower status was unknown to be a challenge, but the pharmaceuticals price of the agency could not be a challenge, since it was affordable to its customers.

## **5.2. Conclusion**

This study, eventually, drew a conclusive statement on the prospects of supply chain management practices and the challenges which faced these practices. Regarding the prospects of supply chain management practices of the agency, the agency has good customer relationship management practices which ensured customer oriented service provision. Thus, the agency has concerned its customers to be closely treated. In a similar vein the agency supplier strategic partnership and information sharing practices have been found in a good status. In this regard the agency had planned with its partners and worked together in collaboration with a partners. In relation to information sharing practices, the organization share information with in the agency and its partners. Additionally, information's have been evaluated for the distortion incidence before the utilization and accurate information utilized for decision making of the agency. Information shared and utilized by the agency for the demand forecasting in its supply chain management practices.

On the other hand, the study also identified the challenges which faced in the supply chain management practices of the agency. Competitiveness, availability of vital items, technology, human power, and personal resources were identified challenges which faced the supply chain management practices of EPSA Jimma branch.

### 5.3. Recommendation

In order to accomplish its goals and to be effective EPSAJimma branch should give due emphasis on its supply chain management practices of pharmaceuticals. Cost effective and efficient movement of pharmaceuticals and medical equipment is relevant for the successfulness of agency. Based on the assessment made on practices of supply chain management and its challenges, the following remarks were drawn:

- ✚ The agency should have concentrated on the supplier strategic partnership, through involving the strategic plan to set the road map for their common values.
- ✚ The agency should have to concern its customers compliments them in all form of services in a similar ways for all the customers in order to build customer loyalty and achieve effective customer relationship management. .
- ✚ Technology had a great contribution on the supply chain management practices. Currently, it's a challenge of supply chain management practices of EPSA Jimma branch. Thus the agency should have to exert its maximum effort to adopt the feasible technologies to its supply chain management practices.
- ✚ The agency should have to play its role on aligning an effective ways of information sharing methods to strengthen the internal and external communication means.



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## *ANNEXE- Questionnaire*



**JIMMA UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF MANAGEMENT**

*Dear respondents*

My name is **WakijiraAdem** conducting a study on **Prospects and Challenges of Pharmaceuticals Supply Management Practices at EPSA Jimma branch** for the partial fulfillment of master's degree in logistics and transport management in Jimma University, college of business and economics department of management. I would like to extend my deep appreciation to your hub and you for the willingness and cooperation in undertaking this valuable research. Taking part in this study you will contribute towards alleviating the problem of Supply chain management practice of your facility. I request your cooperation to fill and respond truthfully for the asked Questions. If you have any question, you can contact me through **0913839458**. Finally, I would like to appreciate and thank you in advance for your dedication, time and genuine response to the questions.

**PART I: GENERAL INFORMATION AND DEMOGRAPHIC BACKGROUND OF RESPONDENTS**

**Please tick (✓) or provide your own answers where applicable.**

1. Sex:            Male             Female

2. Age: \_\_\_\_\_

3. Work experience in the agency (in years)?

<3years             3-5years             6-10 years             >10years

4. Educational level

Diploma             1<sup>st</sup> degree             2<sup>nd</sup> degree             Others, \_\_\_\_\_

5. In which health facility do you work in? \_\_\_\_\_

6. Department you work in the agency? \_\_\_\_\_

7. Position in the agency? \_\_\_\_\_



**PART II: INFORMATION OF PHARMACEUTICALS SCM PRACTICES IN ETHIOPIAN PHARMACEUTICALS SUPPLY AGENCY**

This part of the questionnaire consists of twenty four (24) questions. The main purpose of this instrument is to examine “ Prospects of Pharmaceuticals SCM practices and the challenges faced the practices”.Judge how frequently each statement fits the situation of your organization. Use the following rating scale, and put “✓” mark for each rating.

**Key: Strongly agree (5), Agree (4), Neutral (3), Disagree (2), and strongly disagree (1).**

Statement	Rating				
	5	4	3	2	1
<b>PROSPECTS OF PHARMACEUTICALS SCM PRACTICES</b>					
<b>CUSTOMER RELATIONSHIP MANAGEMENT</b>					
The agency could able to satisfy the pharmaceuticals need of its customers					
The agency could able to satisfy the needs every potential customers in similar manner					
The agency deal with its customer in different ways					
The agency had a customer segment to keep its potential customers relationship					
<b>The modern technology available to the agency also supports the individualistic treatment of customers</b>					
To maintain a relationship first of all, the service purchased from the agency by customers has fit the customers.					
The agency had good service oriented culture for its customer relationship management					
<b>Strategic Supplier Partnership</b>					
The agency had set mutual planning with its suppliers					
The agency closely aligned with the suppliers to work together with economical time					
The agency partnership with the suppliers promote shared benefits					
The agency long term partnership with the suppliers					
Suppliers of the agency willing to share the responsibility of the products					
<b>Information Sharing</b>					

The agency efficiently share information with its partners					
The agency up to date information of its supply chain status data					
The agency has been used relevant information for decision making					
The agency share information from its partners to forecast the pharmaceuticals demand of the customers					
The agency evaluate the information which shared from the partners to prevent the bullwhip effect on its supply chain					
<b>Challenges/Barriers for SCMPs</b>					
The agency had a competitive challenge on its operations					
Man power skills is one of the challenges of the agency on its SCM practices					
Vital product availability is a challenge for SCMPs of the agency					
Technology is a challenge for SCMPs of the agency					
Pharmaceuticals products price is a challenge for SCMPs of the agency					
Human power is a challenge for SCMPs of the agency					
Personal resources is a barrier for the facility implementing Good SCMPs					

**Thank you for your time and Response!!!**