



**ADDIS ABABA UNIVERSITY
SCHOOL OF JOURNALISM AND COMMUNICATION
DEPARTMENT OF PUBLIC RELATIONS STRATIGIC COMMUNICATION**

Assesment Of The Drawbacks Pharmaceutical Supply Of Chain Of Communication: The Case Of
Ethiopian Paharmaceutical Supply Agency.

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OF COMMUNICATION:THE CASE OF ETHIOPIAN PAHARMACEUTICAL
SUPPLY AGENCY.**

BY

ALEMSEGEDCHANE

**A Thesis Submitted To Addis Ababa University School Of Journalism And Communication In
Partial Fulfillment Of The Requirements For The Degree Of Masters Of Art In Public Relations
Stratigic Communication.**

Advisor

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**Addis Ababa
Ethiopia
Jun.2021**

Declaration

I hereby declare that this thesis entitled "Assesment of the drawbacks pharmaceutical supply of chain of communication:the case of Ethiopian paharmaceutical supply agency." A Study on EPSA ETHIPIA pharmcuticalsupplay head office carried out in my own work and that, to the best of my knowledge and belief, that this work has not been submitted for any other degree or processional qualification except as specified.

AlemsegedChane

Signature

Date

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Department Of Public Relations Strategic Communication. This Is To Certify That The Thesis Carried Out By AlemsegedChane , Entitled: “Assesment of the drawbacks pharmaceutical supply of chain of communication:the case of Ethiopian paharmaceutical supply agency. /EPSA/ ” And Submitted In Partial Fulfillment Of The Requirements Of The Degree Of Master Of Art In Public Relations Strategic Communication With The Regulations Of The University And Meets The Accepted Standards With Respect To Originality And Quality. Approved by the Examining Committee:

Signed by the Examining Commitee

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Lastly, I would like to thank my family for the continuous support they have given me throughout my life

Besides,

ABSTRACT

The main objectives of this *research* was to assess Assessment of the drawbacks pharmaceutical supply of chain of communication:the case of Ethiopian pharmaceutical supply agency.

Method .In this study a mixed method descriptive survey research design and depth interview were employed Questionnaire were distribute among 100 respondents who were purposely selected from the agency .All the respondents have a direct relations and involvement with the pharmaceutical supply chain communications. Also two key policy and decision makers were selected for interview ..The observed finding indicated that work the organizational effectiveness of pharmaceutical delivery in terms of quality, safety and time by Storage and inventory control practice, Order fulfillment, relations, client service management, Transportation and distribution system with even though the learners ensured using the above mentioned pharmaceutical supply communication fine,

Result

EPSA positively has strong information exchange with the branch hub before drug expired The drawback of communication in pharmaceutical supply chain logistics knowledge base were the other most typically experienced challenges Lack of accuracy of quantification/forecasting.Then leaders have not effective problem solved towered internal communications and the agency have equal understanding about their vision, and mission in addition to pharmaceutical supply chain the agency have not strong productivity, drug wastage, Crisis management handling have good practice in the agency because covid 19 EPSA.Based on the findings it was recommended that the agency should develop their awareness about the various kind of connection strategical properly but, 65% satisfaction is measured in term of drug delivery, continuously practice using customer focused services in order to improved the information exchange mechanisms other than letter and telephone calls need of the patient. here has to be a figure percentage indicating that from the total respondents 60% of respondents saidthis and that. Because descriptive survey on what opinions and perceptions on the problem of chain supply communication is there in the agency.

Conclusion This study sharing information is essential for organizations to learn from each other in the supply chain. the effectiveness of pharmaceutical distribution in terms of quality, safety and time by Storage and inventory control practice, challenge an others followed by lack of collecting receivables ,lack of modern management techniques, poor exchange of information, lack of integrated system, increasing logistics cost, insufficient logistics management capacity, and inability to access and apply the growing logistics knowledge base were the other most experienced challenges Lack of accuracy of quantification/forecasting .

Key words : pharmaceutical supply communication, information exchange and Lack of accuracy of quantification/forecasting

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CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Modern organizations are merely built on communication. Some academics believe that communication existed before the formation of companies. According to some scholars, communication is not only an important aspect of these recent organizational changes, but it can also be viewed as the foundation of modern organizations;

(Grenier, R., and G. Metes. , 1902)

Effective communication can adversely affect the business propositions of organisations (Bao, 2008). It can typically create or sufficiently damage organisational processes (Wienclaw, 2008), and hence plays a vital role in business organisations. Personal communication represents an integral process involved in the successful management of social networks of suppliers, manufacturers, distributors, retailers, and clients, and this includes forwarding materials from providers to customers and information surges multi-directionally (Lamming, 1996).

Health communication principles are used for a range of disease prevention efforts and health promotion strategies, including advocacy for health issues, marketing health plans and products, and community mobilization Thomas RK. (2006)

Communication scholars generally classify modes of health messaging into three main categories: interpersonal, mass media and traditional Johnson JD, Meischke (1993). Interpersonal approaches include exchanges between various types of health care providers' (e.g. doctors, nurses and community health workers), and those outside the health profession (e.g. family, friends, and informal community

groups) . This approach is preferred for the transmit of information and teaching of skills to encourage desired behavior changes

According to Parrott R. Emphasizing (2004) said that Mass media communication channels transmit information for target audiences through television, radio, and written materials such as posters, books, leaflets, magazines, and newspapers. They are primarily focused on reaching large segments of population

The World Health Organization (WHO) scarcely defines direct access to used medicine as a social priority for concerned citizens. It needs to be available at all times in adequate amounts, in appropriate dosage and quality, and at an affordable price for individuals and communities. (Marks, 2009 and Yadav et al., 2011).

Procurement is a significant part of efficient drug management and supply and is critical for all levels of health care institutions. An effective procurement communication process ensures the availability of the right drugs in the right quantities, available at the right time, for the right patient, and at reasonable prices, and at recognizable standards of quality. (WHO 2007).

Most organizations communicate from both the top and the bottom. Effective communication is a critical component of any organization. "Listen to and react to the desires of our clients, accomplices, and communities; merchants respect them as accomplices" (Domestic Station, 2006).

The drawback of communication can lead to all kinds of problems in supply chain operations, such as: Stagnant or late deliveries , Lost items , Demurrage and storage fees, as well as additional chassis fees and An inability to plan inventory turn.

Managing at the level of a supply chain requires a new form and new ways of thinking as by Lambert et al (1998). Managers must learn to communicate, coordinate, and cooperate with supply chain partners to have the right product in the right place, at the right price, with the right conditions (Assintel, 2000).

According to (Lee, 2000), the three dimensions of supply chain integration: information, coordination and generational linkage. Information integration refers to the sharing of information and knowledge among the members in the supply chain, including sales forecasts, production plans, inventory status and promotion plans. Coordination refers to the realignment of decisions and responsibility in the supply chain. Organizational linkages include communication channels between the members in the supply chain, performance measurement, and sharing of common visions and objectives.

Information is critical to an effective and efficient procurement process on the other hand financing is the engine that drives it. In the case of ethiopia for example, (world Bank 2007) ensuring adequate financing for the procurement of pharmaceuticals remains an important part of medicines procurement. Pharmacists involved in hospital procurement of medicines, whether directly or indirectly, must be knowledgeable about medicines as well as the interacting issues and the many stakeholders who can potentially affect the process or who may have legal responsibility

A supply chain there have been some combination of companies who perform different functions. There have been companies that are producers, distributors or wholesalers, retailers, and companies or individuals who are the customers, the final consumers of a product. Supporting these companies there will be other companies that are service providers that provide a range of needed services SCM consist of the entire sets of processes, procedure, the supporting institutions, and business practices that links buyers and sellers in a marketplace. (Bagchi, P.K., 2000).

Bhakoo and Chan (2011) have considered pharmaceutical supply chain more complex because it requires the participation of different stakeholders such as pharmaceutical manufacturers, wholesalers, distributors, customers, information service providers and regulatory agencies. Because of these complexities, the pharmaceutical sector is not widely researched. It is also felt that because of lack of research, the pharmaceutical sector in developing countries is unable to contribute significantly in

global markets. Such as in the Indian context, Mahajan et al. (2015) observed that the pharmaceutical industry has largely capitalized on its low-cost production of generic drugs and in domestic market. Therefore, the present study will try to identify existing research gaps in this sector on the basis of past literature

1.2..Baground of the study

ETHIOPIA pharmaceutical agency was established in September 2007 by Ethiopian procurement of no553/2007. The major objectives were to purchase affordable price drugs and assure quality drugs, ensure sustainable drags for the customers needed and cost sharing of the enabling the agency.FDRE (2006).In Ethiopia, pharmaceuticals market is increasing from time to time. Most of the pharmaceuticals (75%) are imported; however 25%of the pharmaceuticals are manufactured locally.

So the distribution of Pharmaceuticals needs great attention in order to reach the end customers. The pharmaceuticals supply chain passes steps from demand forecasting by health facilities, procurement from international and national suppliers, importing, storage and distribution to health facilities and end users. Distribution of pharmaceuticals follows integration pharmaceuticals logistics system (IPLS), through which all pharmaceuticals requested, reported, received and managed integrated manner. Pharmaceuticals fund and supply agency is responsible for distribution of pharmaceuticals mainly to public hospitals, health centers, Woreda health office and private .Health communication is the study and practice of communicating promotional health information, such as in public health campaigns, health education, and between doctor and patient. The purpose of disseminating health information is to influence personal health choices by improving health literac.

1.3. Statement of the problem

Ethiopian health organizations, such as health centers, general hospitals, and their share hospitals, FMOH (May 2019) 19th annual review meeting Bulletin. The National Pharmaceutical SCM, Pharmacy Service, and Medical Device Monitoring and Evaluation framework.

Ethiopia pharmaceutical supply agency is the only government organization the buys and distributes drugs by Aviles in public health organizations. This organization currently has a huge amount of capital invested in Ethiopia by the government, but the drug availability has not improved because most public health organizations are not equipped to handle this situation. Because of this, ha they have no satisfaction with the customer need. the research focused on the major problems with this organization's distribution problems because one area has drug availability that is different from place to place. In one area, there was high availability and in the other area, there was a shortage of the same drug. Due to this, the problem of communication gaped. Poor communication and flow of information between the various stakeholders, limited use of technology solutions, poor road infrastructure, and availability of vehicles. (WHO, 2006).

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Communication was very important for any organization because communication was the safeguard for any organization to be sustained. So, EPSA was the major problem-solving communication with the agency and other stockholders. Through discussion with the drug agency and the health sector stockholders we alleviated unexpected problems.

Communication was crucial to how leaders can bring change to the forefront of the company. In response to industry trends, leaders must convey the changes to personnel effectively (French & Holden, 2012). Learning how to determine and improve what communication strategies to used and how communication affects health care personnel during organizational change would help organizational leaders who have been difficulty communicating the change to employees and determining the timing of implementation (French, S. L., & Holden, T. Q., 2012)

Most of the information sharing theories and practical approaches focus on the technological aspects of information sharing (Fawcett, et al. 2007).

Therefore it could be found that the connectivity, for example, in the form of technologies and the willingness to share information were two fundamental elements of information sharing (Fawcett et al., 2007).

The second research was study sharing information was essential for organizations to learn from each other in the supply chain. The opportunity to learn from others could encourage the continuous improvement of supply chain communications. Learning offers the opportunity to question and challenge existing processes that different workplaces institutionalize as standard behavior (Hyland, Soosay, & Sloan, 2003) Concerning the management of information an organization should generate, acquire, processed, and used information (Myburgh, 2000). Information sharing was not perfect, especially in supply chains, and this complicates decision making and communicating with a holistic approach.

The Ethiopian pharmaceutical supply agency (EPSA) was the only supplier that procures and distribute pharmaceuticals to all government hospitals and health institutions.

Supply chain integration was the degree to which a manufacturer strategically collaborates with its supply chain partners and collaboratively manages intra- and inter-organizational processes, in order to achieve effective and efficient flows of products and services, information, money, and decisions, to provide maximum value to the customer (Flynnnet.al, 2010). there were problems such as; problems related to lack of alignment among departments, problem-related to the skill of the employees, lack of focus from top management, network interruption, inspection delay, fear of technology, scrap items in all company premises, warehouse space problem and disposal of obsolete items. Such problems happened due to poor supply chain management in general and supply chain integration problems in particular.

Its capability to meet variable needs of all health institutions based on different disease patterns of different regions was in question. EPSA delivers pharmaceuticals mostly with cottas rather than actual demand forecasted (PFSA SOP, 2010). However, there were significant Problems and challenges of

supply chain communication performance such as Supply chain information sharing, learning, relationships, complexity, and flexibility to change

Due to this my research was different from others. Therefore, the researcher conducts this research with the aim of that it would minimize the supply chain communication gap in the case of the Ethiopian pharmaceutical supply agency. pharmaceutical supply is a key problem of health sector area. FMOH has recognized their problems of medication satisfaction to solve their problem different tactics had implemented According to (kefele AT,Shebo HH., 2019) Studies show that the majority of public health facilities in Ethiopia face a frequent shortage of medicines and the percentage, availability does not exceed 80%. This is contrary to the aim of the Sustainable Development Goal (SDG), which promotes "access to safe, effective, high quality, and affordable essential medicines and vaccines for all" as a core element of Universal Health Coverage. Inadequate access to pharmaceuticals significantly affects the quality of health service delivery. As a result, people suffer from a low to a higher level of health issues, from no relief to the immense pain of a child's ear to women's death during delivery with profuse bleeding and patients dying from preventable and curable diseases but the agency main objectives are "to ensure uninterrupted supply of quality-assured pharmaceuticals to the public at affordable price through strengthening integrated supply chain system, enhancing financial and human resources capacity, evidence-based quantification, efficient procurement, improved warehousing and inventory management, direct delivery to health facilities, and promoting rational use of medicines." Based on this my research reached evidence-based decision for the organization improvement

1.4. Basic Research questions.

- What problems and challenges eveloping a supply chain communication strategic system for the whole supply chain.

- What are the communication strategy of drug supply chain management in EPSA?
- What were the major drawback of supply chain communication of pharmaceutical distribution?
- To what extent EPSA coordinated with health facility in order to solved problems regarding data reporting, collection and analyzing?

1.5. Objectives of the study

1.5.1. General Objectives

The general objective of this study was the drawback of supply chain communication and distribution effectiveness in Ethiopia pharmaceutical supply Agency/EP SA/.

1.5.2. Specific Objectives

To assess the communication strategy of drug supply chain management and distribution in EPSA?

- To identify the major drawback of supply chain communication of pharmaceutical distribution?
- To determine the extent of EPSA coordinated with health facility in order to solve problems regarding data reporting, collection and analyzing..
- To develop a list of common challenges when communication in the operations of a supply chain.
- To analyze the impact of supply chain integration elements (supplier, information, internal, and customer integration) on supply chain performance.

1.6. Scope of the study

Scope of the study Geographically, the study focuses on the drawback of supply chain communication and distribution operational departments directly involved to supply of pharmaceuticals

at central EPSA on supply chain. These departments include quantification and market shaping, tender management, contract management, warehouse and inventory management and distribution and fleet management directorates. It only evaluated the phenomena from the view point of the staff of the company that have a direct contact with supply chain works (including forecasting, procurement, contract management, warehousing and inventory management and distribution). The operational scope covered with communication; information integration, coordination and resource sharing and organizational relationship linkage on supply chain dimensions including flexibility, delivery, cost and quality.

1.7. Significant of the study

This study assesses the drawbacks of Pharmaceuticals supply Chain communication and distribution systems such as warehousing and Storage, coordination in fleet management, and some of the communication problems in pharmaceuticals supply chain distribution system at EPSA.

The result of the study will be useful for EPSA management for implementing corrective measures which improve the gap of Communication supply chain distribution system. There are limited numbers of studies done on this area, so this Study will be useful for academicians to further studies on the area. The research will also bring directions for further investigators.

1.8. Limitations in Data Collection.

The limitation of the study is, it only focuses on the case of central EPSA employees. The data has been collected from central EPSA warehouse, distribution and transport units and other stakeholders and detail analysis of data is needed for further conclusion.

1.9. Conceptual Definitions.

Communication: is crucial to how leaders can bring change to the forefront of the company.

Pharmaceuticals: are all medicines, laboratory reagents, medical supplies and medical Equipment.

Distribution: Distribution is the process by which products are physically transferred from their Point of production or upstream warehouse to the point at which they are available to the final customer

Health Facilities: are hospitals and health centers who receive pharmaceuticals from EPSA branches.

Warehouse managers: are professionals who manage pharmaceutical products at different warehouses of pharmaceutical fund and supply agency.

Drug: natural or synthetic substance which (when taken into a living body) affects its functioning or structure, and is used in the diagnosis, mitigation, treatment or prevention of disease or relief of discomfort.

Drug supply chain management: managing drug supply and demand ,sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channel, and delivery to the customer.

Health communication : communicating promotional health information

Patient/client satisfaction: the degree of positive feeling that patients/clients experience having used a service.

1.10. Organization of the Study

The study was organized into five Chapters. The first chapter include: Background of the study, Statement of the problem, Research questions, Research objectives, Significance of the study, Scope of the study, Limitation of the study, and Definition of terms and Organization of the study. Chapter two include: a review of related literature . chapter three includes research methodology(research design, population of the study, sampling techniques, sample size, data collection instruments, the data

collection procedures and ends with data analysis approach).next chapter is chapter four results of the research and the discussion upon the findings. The last chapter is chapter five presents a summary of the major findings of the research and recommendations based on the findings. Also this chapter contains the conclusion and section of the study.

CHAPTER TWO

2. Literature Review

2.1. Introduction

This chapter A number of books, articles, reports, and websites on supply chain management have been studied for this research work. It has been found that literature with specific focus on this sector in EPSA was not sufficient. However, a brief review of literature has been carried out.

The review of literature provides an understanding of the issues closely related to the research topic. It also helps to justify the research under study and to find out the knowledge gap in the respective field.

The chain of information and communication technologies has been identified as an ideal solution to the problems associated with the implementation of SCM strategies. Argent and Forman (2002) effective corporate communication were developed by creating effective relationships between organizations and stakeholders,

Communication is a hallmark of both traditional and sustainable supply chain management.(Gold, Souring, and Beske, 2010).and They have developed a need for research based on best practices pursuing effective communication methods.

2.1. The Concept of Supply Chain Management

The supply chain was a distribution service based on demand and supply interaction that included material suppliers, manufacturing facilities, and customers. Most organizations provide a channel for facility managers to interact. This office is in charge of the organizations' resource management. Supply Chain Management (SCM), according to Stadtler (2008), is the act of sharing materials, information, and resources.

As the pharmaceutical challenges with different partners requesting the pharmaceutical items to be reasonable, vital arranging would be of the quintessence (Holdford, 2005; Birdwell, 1994). For the pharmaceutical industry, it expects uncommon noteworthiness as therapeutic commodities would

require to be conveyed through the supply chain opportune and inside the reach and implies of the customers to meet their needs and fulfillment (Enyinda, 2009). A Supply Chain was that arrange of organizations which have included through upstream and downstream linkages within the diverse forms and activities that deliver esteem within the frame of items and administrations within the hands of the extreme client or customer (Lysons and Farrington, 2010)

There are three main objectives of a supply chain management. The first on improving customer satisfaction, second improving services and the third increasing competitiveness based on (Mosavi and Ghaedi 2012); 6: 2897-2910. In the other A supply chain management aims to lower the costs and resources involved in the creation of products as well as improve efficiency and effectiveness. Pandey V (2010). SCM also focuses on reducing inventory levels and respective costs Cooper and Ellram 1993; 4: 13-24 increasing profits Droge, Jaramand ,V,(2004; 22: 557-573).and improving cooperation .Flynn ,(2010; 28: 58-71)

According to Chopra and Meindl (2005), supply chain management "is the administration of a group of retailers, wholesalers, transporters, capacity offices, and providers that take an interest in the deal, conveyance, and generation of a specific product". In Ethiopia, the supply chain is characterized by poor attitude coordination and communication. In order to follow the Ethiopia Food, Medicine, and Healthcare Administration and Control Authority Pharmaceutical Traceability Strategic Plan 2018, there is a lack of coordination and communication among stakeholders. Implementation Communication between stakeholders is currently insufficient for implementation.

The pharmaceutical supply chain is the integration of all exercises related to the stream and change of crude materials through to the end-user, as well as related data streams, through moved forward supply chain connections to attain a feasible competitive advantage. Supply Chain Administration is the major

component of the supply chain, such as systems, linkages-upstream and downstream. Supply Chain Administration has defined as the organizing of associations that include, through upstream and downstream linkages, diverse preparations and activities that create esteem.(Duby and Kumar, 2007).

2.2. Pharmaceuticals Supply Chain in Developing Countries.

In developing countries, the experience of health sector supply chain management was very complicated and poor administration for the industry. It has affected many organizations, the flow of their supply chain. Poor administration affects the human wellbeing of life. It has three major causes, such as the first one, unaffordable prices, not efficient and the third, the poor quality of medications.

If pharmaceutical supplies are out of stock, they are conveyed to the off-base persistent or arranged. According to the World Health Organization (WHO), the world's medicine situation, up to half of the population of African nations still lack access to essential medicines and health services. It is a good way to start the day. In case pharmaceutical supplies had out of stock, conveyed to the off-base persistent or had arranged. According to the World Health Organization (WHO) reported that the world medicines' situation, 2 up to half of the population of African nation's still lack access to essential medicines and health services .

Greening to Prof. Allan, (2013). The most Supply Challenges of African nations had destitute data, communication and utilization information, in satisfactory capacity offices and a need of administration strategies. The challenges incorporate determination and evaluation of request, a need of straightforward acquirement strategies, insufficient capacity offices and capacity, need of rules for great capacity methods, a need of fitting arranging, checking and assessment and insufficient budget assignment research work carried by Privett and Gonsalvez (2014) identified the top ten challenges of global pharmaceutical supply chain such as Lack of coordination, inventory management, Absent

demand information, Human resource dependency, order management, Shortage avoidance, Expiration, Warehouse management, Temperature control, Shipment visibility.

Ethiopia received the five-year GMP Guide (2013–2018). The guide was started with the point of progressing open to get to maintainable, reasonable, secure, solid and good-quality solutions created in Ethiopia.

Neighborhood generation can move forward reasonableness of quality medicens. It has the potential to offer other focal points over imports. For illustration, by shortening related supply chains it can offer assistance diminish stock outs; and by extending and broadening the supply chain, it permits creating nations to secure get to in reaction to developing requests.

There was moreover a few prove to recommend that locally made items are more effective in coming to provincial populaces than imported ones. The nearby fabricating activity, actualized by the WHO and its accomplices in collaboration with the EU Commission and Bill and Melinda Entryways Establishment (BMGF), investigates, advances and bolsters the attainability of quality neighborhood generation in creating nations the WHO Worldwide Technique and Arrange of Activity on Open Wellbeing Development and Mental Property (GSPA-PHI)⁴ and aims to increase access to essential medicines, vaccines, medical devices, invited diagnostic tests and blood products in the developing countries.

In 2012 Ethiopia adopted a Roadmap for a pragmatic, three-phased approach to improving the GMP-compliance status of pharmaceutical manufacturers in the country. Under this roadmap, all manufacturers in Ethiopia are expected to become compliant with WHO GMP standards by 2018.

2.2.1 Responsive Supply Chain:- Drug stores were the ultimate step on the pharmaceutical supply chain some time recently drugs reach the consumer/patient. With regard to responsive

supply chain, the objective was to be reacting rapidly to unpredictable demand to arrange to play down stock out, constrained markdowns and out of date stock. Once more, companies must work aggressively to diminish their lead time, as long because it didn't expand their taken a toll and create tall turns and minimize stock all through the chain (Johnet.al, 2015).

2.2.2 Supply Chain Risk

Hazard administration required quick reaction to effectively and successfully review and recoup harm and defective items, as well as capacity to take note of likely issues some time recently they happen (Gravesaet.al, 2009). Supply chain chance administration was, hence, a field of raising significance and had been pointed at creating approaches to the distinguishing proof, appraisal, examination and treatment of ranges of defenselessness and chance in SCs. Different patterns that upgrade introduction to dangers, such as the expanded utilize of outsourcing, globalization, diminishment of the provider base; decreased buffers, expanded request for on-time conveyances or shorter item life cycles were expanding the significance of SCRM.

2.2.3. Supply Chain Disruption

The Ethiopian pharmaceutical supply agency's distribution of medical supplies is based on the size of the patients' in the hospitals. Medical equipment distribution is always a good governing issue in most health institutions, especially laboratory regents. Drug supply availability could not be gotten easily. As a result of this, many patients suffered from one health center to the other. Due to this, most customers were dissatisfied with their work. The major problem with this was the poor distribution management system.

Disturbances to pharmaceutical/healthcare supply chains can put the lives of expansive numbers of men, ladies, children and senior citizens in peril happen (Gravesa et al.,2009).

2.2. 4.Supply Chain Challenges

supply chain challenges in Ethiopia: spatially, the health sector has three major problems with the supply chain. Those are poor communication, poor data use, and poor use of the supply chain. Based on this miscommunication, our resources are limited. The agency sent the medical supplies, but the delivery of the supplies could not be reached based on the request. On the other hand, any hospital may have the supply by chance without request. This is misinformed or the barrier of the supply chain could not be informed.

A workshop by WHO (2006) diagrams the troubles of the medication supply of African nations; the most challenges being poor data, communication and utilization information, insufficient storage facilities and temperature control frameworks, and a need for quality affirmation methods.

2.3. Communication problems within the supply chain

communication are one of the ways of providing resources and achieving targets. Communication is very important in most African countries. Especially in the health sector, communication was very important, but leaders could not emphasize communication skills. In the health sector, lack of communication skills, the agency by a huge amount of medical equipment and supplies, resources are not properly utilized. Those involved in the operations and logistics department A supply chain is associated with streams of data, which ought to share an incredible bargain of data within the course of their intuition (White, 2004).

However, miscommunication or the lack of communication among those involved in the network can lead to problems such as backtracking, delayed delivery of the consignment, failure to achieve commitment, and even financial losses.

A supply chain was remains associated by streams of data, funds, and fabric by the providers, makers, retailers, merchants, and clients. supply chain administration have changed to useful integration of calculated forms exterior the firm, requiring multi-direction communication with providers and clients (Drake and Schlachter, 2008) Firms locked in in supply-chain connections, as clients, providers, or suppliers of administrations,

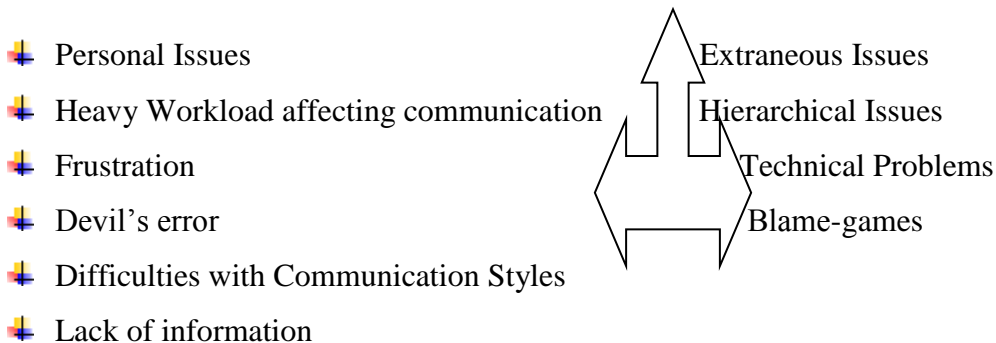
Over a long time, companies have overseen these data streams in several ways, counting phone calls, letters, messages, faxes, and electronic information compatibility (EDI)

However, miscommunication or the lack of communication among those involved in the network can lead to problems such as backtracking, delayed delivery of the consignment, failure to achieve commitment, and even financial losses.

In the other miscommunication and lack of information among several units of the supply chain. Those involved in operations and logistics department:

Model of Communication Problems in Supply Chain

Blame-games Language related Problems



Figour 1. Consuptual fremwork

2.4. Component of communication in supply chain

The three most communication components according to Agreeing to Michilewilsen June 21.2018 supply chain described that integration, operations, and conveyance

Integration is the most systematically managed supply chain communication integration based on time, knowledge, and resources. These three components determine to increase efficiency and effectiveness. Without integration, we can not achieve the target of the organization's mission.

For example, EPSA has good experience of stockholders integrated, such as working together WITH other sectors, such as the transport sector, investment sector, revenue, and others. Operation means day-to-day activity to solve any feedback and solve their problems. tors, such as the transport sector, investment sector, revenue, and others. For example, EPSA has good experience

2.5. Information flow is considered the most important

the information system is an integral part of the agile supply chain which can increase its speed and flexibility. Information sharing means distributing useful information for systems, people, or organizational units. According to Mehraline and et al.(2014), Data sharing and data administration which is essential for coordination and collaboration among supply chain accomplices can decrease the supply chain dangers.

‘Data Sharing’ can too be alluded to as ‘Knowledge Sharing’ or ‘Information Integration. Information frameworks by decreasing “silo

To enhance the results of information sharing, organizations should answer four main questions: First, we ask what to share, then whom to share it with, then how to share, and finally when to share. The quality of answers will help to avoid redundancy, reduce sharing costs and improve responses Sun S,(2005;) 422-428. The term effect” can avoid these issues by giving the proper data within the right time for the proper choice creator Khorramnia A and Forutan (2013).

In addition, Kumar and Dubey (2007). are two people that have worked together Each supply chain stakeholder need a dependable, standards-based system to govern the information that may be accessed, how that information can be utilized, and to confirm the legitimacy of that information.

2.5. Supplier Relationship Management Or Supply Management

Supplier relationship management is the process by which a company defines how it interacts with its suppliers. This is a mirrored image of customer relationship management, as the name implies (CRM). A company must cultivate relationships with its suppliers in the same way that it cultivates relationships with its customers.

The desired result is a win-win situation in which both parties benefit. (Supply Chain Management Institute, 2008)SRM progresses the effectiveness of forms related to the securing of merchandise.

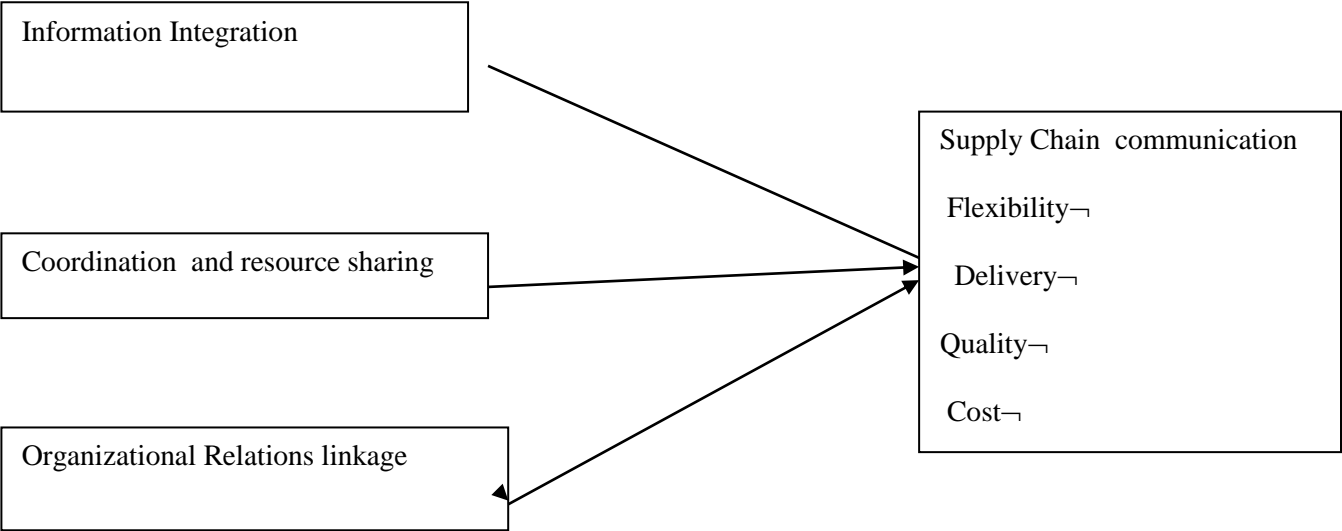
In the relations between perching and supply chain communication was characterized as a vital, enterprise-wide, long-term, multifunctional, energetic approach supported by other other"The complete esteem organization from crude materials to the last client utilize and transfer to persistently diminish proprietorship costs, oversee dangers, and make strides in execution" (Leftwich, Leftwich, Moore & Roll, 2004)

2.5 Challenges for Supply Chain management

There are several challenges to supply chain management, especially in health care. pharmaceutical supply chain problems are different, such as leaders' commitments, lack of communications skills, shortage of budget, and others. According to Ching et al. (2004), barriers to SCM implementation in a Hong Kong study were a lack of top management commitment, a lack of SCM training for personnel, poor Inaction to other problems poor planning, leat order requested, shortage of transportations and others According to (Hassan 2012) said that poor infrastructure, bulky materials to be transported, poor planning special mat.

On the other recommends that the government establish SCM expert training units, improve port and airport communication, and extend customs and excise department working hours.

2.6. Conceptual framework of the study



2.7. Health communication Theories

The Centers for Disease Control and Prevention (CDC) (2001) define health communication as “the study and use of communication strategies to inform and influence individual and community decisions that enhance health”; health communication can play in influencing and supporting individuals, that will ultimately improve health outcomes

One of the key objectives of health communication is to influence individuals and communities. The goal is admirable since health communication aims to improve health outcomes by sharing health-related information. In fact,

The word influence is also included in the Healthy People 2010 definition of health communication as “the art and technique of informing, influencing, and motivating individual, institutional, and public audiences about important health issues”

(U.S. Department of Health and Human Services, 2005, p. 11-2) “Health communication is a process for the development and diffusion of messages to specific audiences to influence their knowledge, attitudes, and beliefs in favor of healthy behavioral choices” (Exchange, 2006; Smith and Hornik, 1999)

“Health communication is the use of communication techniques and technologies to (positively) influence individuals, populations, and organizations to promote conditions conducive to human and environmental health” (Maibach and Holtgrave, 1995, pp. 219–220;

2.8.The Role of health communication

The critical role of communication, the Picker Institute report describes the process this way: Communication encompasses the exchange and sharing of information among several key players of the healthcare team, including communications between patients/families and providers, as well as among providers collectively In many ways, questions regarding the impact of communication theory on health and health communication practices parallel the concern raised by Thompson, Parrott, and Nussbaum (2010) about the impact of health communication research. responsible for a patient’s care. Communication is a foundation of effective patient-provider partnerships. It is a theme constant in any interaction a patient may have with the healthcare system. (Picker Institute, 2011, pp. 6–7).

Another important document, the Pew–Fetzer Task Force Report (1994, p. 9), used the same language—“exchange of information”— in describing the critical dynamics between practitioner and patient Clearly, the “information exchange and sharing” perspective is at odds with more nuanced, contemporary communication theory, which emphasizes the way people create, convey, select, and interpret the messages that inform and shape their lives (Ruben & Stewart, 2006)

The relational dimensions of communication also may be of primary importance to patients and their families in their judgments of provider competencies and the quality of the care being provided. Because, as mentioned previously, most patients and family members lack the knowledge necessary to assess the clinical quality of the care they receive, their evaluations emphasize relationship quality, the interpersonal communication skills and competencies of the provider, and how they are treated personally (Korsch & Negrete, 1972; Ruben, 1990).

These priorities influence reactions to professional providers, and also to support and administrative staff, whose communication behaviors can have a significant influence on health care decisions by patients and family members, even though such decisions are not based on the medical quality of the treatment (Tallia, Lanham, McDaniel, & Crabtree, 2006)

The function of Ethiopian Pharmaceuticals Supply Agency (EPSA) Ethiopian Pharmaceuticals Supply Agency, EPSA, is a legal entity established under the law of the Federal Democratic Republic of Ethiopia Government to overcome the problems and assure uninterrupted supply of pharmaceuticals to the public at an affordable price. The Pharmaceuticals Fund and Supply Agency were established in September 2007 by Proclamation No. 553/2007 as part of Pharmaceutical Logistic Master Plan implementation with the following objectives:

1. To enable public health institutions to supply quality assured essential pharmaceuticals at affordable prices in a sustainable manner to the public; To play a complementary role in developmental efforts for health service expansion and strengthening by ensuring the enhanced and sustainable supply of pharmaceuticals;
2. . To create enabling conditions for enhancing the accumulation of funds in its revolving and cost recovery process and thereby ensure the realization of the objectives

Your Research is with an original idea and is a very important issue to undertake:

2.9. Identify communication audit:

there are different strategies of communication impact assessments that concerns the internal and external means of communication used by an organization rather than the agency's /company's entire public relations program. Pharmaceuticals supply chain communication and distribution and management on the performance of warehousing, challenges of communication for distribution, fleet/taskforce/ management and organization, communication; information integration, coordination, and resource sharing, and organizational relationship linkage on supply chain dimensions including flexibility, delivery, cost, and quality

2.9.1. Study Public relation audit:

the study of public relations positions of an organization. Such studies are used to measure a company's standing both internally (employee perceptions) and externally (opinions of customers, stockholders, community leaders, and so on). Describe, measure, and assess an organization's Public relations activities and provide guidelines for future public relations programming

2.9.2. Study Social audit:

A social audit that is a small-scale environmental monitoring program designed to measure an organization's social performances-that is how well it is living up to its public responsibilities: the audit provides feedback on the company-sponsored social actions programs such as minority hiring, environmental cleanup, and employee safety.

2.10. Vaccine nationalism

Vaccine distribution remains nonexistent in many of the poorest countries, and experts anticipate that 80% of the population in low-resource settings will not receive a vaccine (Özlem Özsoy, Metin Gürler. 2021)

Although investment in discovery is critical, the long-term neglect of public health and global delivery strategies has left us poorly equipped to end this pandemic.

where countries push to get first access – could slow the global economic recovery, costing high-income countries \$119 billion per year. The cost of supplying low-income countries with vaccines has been estimated at \$25 billion. The global vaccine alliance, Gavi, says pledges to the equal-access COVAX vaccine fund are the best way to end the acute phase of the pandemic.

Both, most people would answer. Nonetheless, “vaccine nationalism,” where countries prioritize their own vaccine needs, is forecast to handicap, not just the global health recovery but the economic one, too.

The Director-General of the WHO has warned against 'vaccine nationalism', where less economically developed countries might lose out.

CHAPTER THREE

3. Research Methodology

3. Introduction

In this chapter, the researcher was describing the methodology. It describes the study area, research approach, research design, population, sampling and sampling technique, research data collection procedure, data analysis, and presentation.

3.1. Research Methods:

The research uses a mix of both quantitative and qualitative methods. Staff who are responsible for the drawback of Pharmaceuticals supply chain communication and distribution and management on the perform of warehousing, challenges of communication for distribution, fleet management and organization, communication; information integration, coordination, and resource sharing and organizational relationship linkage on supply chain dimensions including flexibility, delivery, cost, and quality.

3.2 Description of the study area:

The study was conducted in EPSA Addis Ababa hub one of among 19 branches found in Nifas Silk Lafto Sub-city around Lebu. the distribution activity in the branch has been programmed and RDF(revolving drug fund). In the program, the agency regularly delivered drugs to all ART and PMT CT every two months. Under Addis Ababa hub there are governmental- 33 hospital 419 health center 18 kinema pharmacy and private facility -44 private hospitals and 363 clinics. The agency's vision is to see the public access quality pharmaceuticals with honorable service and the mission of the agency was to avail affordable and quality pharmaceuticals sustainable to all health facilities through revolving drug

funds and capacity building to ensure proper inventory management and rational drug use. The study focused on the effectiveness of pharmaceutical distribution in EPSA.

3.3. Research Design

The design enables the study to combine both qualitative and quantitative research approaches. Qualitative approaches enable the collection of data in the form of words rather than numbers. It provides verbal descriptions rather than numerical (Kothari, 2004).

The study aimed to examine the drawback of Pharmaceutical' supply chain communication and distribution. The major problems were the pharmaceutical supply chain in the communication in the EPSA; the researcher used a descriptive research design. Descriptive studies are more formalized and typically structured with clearly stated evaluative questions (Meyer, 2010).

The research was used mixed research an approach that combines or associates both qualitative and quantitative research methods

Mugenda (2003), states that qualitative methods could be used to gain more in-depth information that may be difficult to convey quantitatively. The quantitative approach strives for precision by focusing on items that can be counted into predetermined categories and subjected to statistical analysis (Taylor, 2013). The use of these two approaches reinforces each other (Zhu et al., 2013). The research used this approach because the data collected using the main questionnaire is quantitative and is analyzed using statistics while the data collected using interviews is analyzed/ describe qualitatively. As noted in (Creswell 2009), enables mutual collaboration of each other via the use of multiple sources of collecting data, contextualizes the analysis by providing richer details, and initiates new lines of thinking through attention and surprises, turning ideas around, and providing value Add the agency.

3.4. Target population

The target population of the study. Ethiopian Pharmaceuticals Supply Agency (EPSA) has nineteen branches located throughout the country and anchored together by a head office in the capital – Addis Ababa. As it supplies pharmaceuticals, chemical reagents, medical supplies, and equipment to over 4,000 health facilities nationwide, it has a big number of employees. It currently has 2,535 permanent employees, 314 contract employees, and a total number of administrative staff are 620. That was a total of 2,849 employees although the number of contract employees fluctuates from time to time. The data have a large number of the employee based on this I selected only directly related the pharmaceutical 265 and management 25 and casteam leaders 30 the total population 320 in t area because of the focus area of the research pharmaceutical workers in head office, and senior management.

$$\text{Population and sample Size} = (Z\text{-score})^2 * \text{StdDev}^2 / (\text{margin of error})^2$$

Here was how the math works assuming you chose a 95% confidence level, .5 standard deviation, and a margin of error (confidence interval) of +/- 5%.

$$n = N$$

$$1 + N(e)^2$$

n: the desired sample size

z: the standard normal deviate usually set at 1.96 (which corresponds to the 95% confidence level)

p: the proportion in the target population to have a specific characteristic. If no estimate available set at 50% (or 0.50) n d: absolute precision or accuracy, normally set at 0.05nq:1-p

Table 1. Sample Size for ±5% and ±10% Precision Levels

where Confidence Level is 95% and P=0.5

Size of Population

Sample Size (n) $\pm 5\%$	for precision (e) $\pm 10\%$	
500	222	83
1,000	286	91
2,000	333	95
3,000	353	97

3.5. Sampling Technique

As the sampling technique this study would employ non-probability sampling, but purpose sampling. Purpose sampling (also known as judgment, selective or subjective sampling) was a sampling technique in which the researcher relies on his or her judgment when choosing members of a population to participate in the study.

The careful design of the sample size and the right selection of sampling techniques were important to ensure the representatives of the sample can be dependable to generalize the information obtained from the sample to the whole population of the study (Kothari 2004). Purpose sampling was a non-probability sampling method and it occurs when elements selected for the sample were chosen by the judgment of the researcher. Researchers often believe that they could be obtained a representative sample by using a sound judgment, which would result in saving time and money (Black, K. 2010 the total number of staff was 2800 then the selected only directly related to the pharmaceutical and management area the head office 320 population selected from those 100 respondents was my sample because those are directly related my research selected method was only directly related the write here

how and why you selected the respondents: How many did you select? What are these guys(responsibilities) and why did you purposely select them?

3.6.Data Collection

The study employed qualitative and quantitative data collection methods. The necessary information was collect through a survey questionnaire, direct observation, and structured interviewing. The quantitative data is obtained from a questionnaire whereas the qualitative data was obtained from an interview and direct observation. Add about the format of the questionnaires: like YES/NIO, Likert scale, etc

And categories of the questionnaire: On the following which respondents give their opinion, Pharmaceuticals supply chain communication and distribution and management on the perform of warehousing, challenges of communication for distribution, fleet/task force/ management and organization, communication; information integration, coordination, and resource sharing and organizational relationship linkage on supply chain dimensions including flexibility, delivery, cost and quality

The researcher tried to grasp the drawback of supply chain communication to understand the current supply chain communication management system of E PSA. The study involved gathering information about the current supplies of pharmaceuticals, chemical reagents, medical supplies, and equipment to over 4,000 health facilities

3.7. Instrument validity

In an attempt to ensure content validity as recommended by Kothari (2004) the questionnaire is developed based on a thorough review of the existing literature concerning the area of inquiry. Furthermore, apart from the initial attempt to strongly ground the adaption of the questionnaire on the extant literature, it is subject to pretest to further ensure its content validity as suggested by Chen et al.

(2004). Therefore, six experienced experts from various directorates of EPSA are involved to critically review the items in the questionnaire for possible ambiguity, lack of clarity, appropriateness, and whether it sufficiently addresses the objectives. Comments are taken as input to make the questionnaire more clear, unambiguous, and comprehensive.

3.8. Research Approach

Research approaches were included; the quantitative, qualitative, and mixed approaches (Creswell, 2014). This study used a quantitative approach, which was used for examining the level of each item among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. The research approach is a mixed-method: quantitative and qualitative approach. For the quantitative a descriptive survey, designing a questionnaire to respondents is used, and to corroborate this a qualitative method depth interview is used.

3.9. Ethical consideration

With a written cooperation letter from the School of journalism and communication department of PRSC and (Annex 2) respondents are approached and informed about the intent of the research. Furthermore, the participant was informed that their response will be kept confidential and will be used for academic purposes only, both verbally and written on the first page of the questionnaire. All those who participate in the survey only with their full consent; their identity stayed anonymous.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4. Introduction

This Chapter discussed on the presentation, analysis and interpretation of the collected data through questionnaire and interview. The collected data through questionnaire was analysed quantitatively using percentage, mean values, ranking order and charts whereas the outcome of the interview was analysed qualitatively.

. Data analysis and descriptive Survey from descriptive survey questionnaires

4.1. Demography

4.2. Supply distribution

4.3. EPSA supply chain management

4.4. supply chain communication challenge

4.1. Demography

Observing the demographic trend or characteristics of our sample population before starting the data analysis is useful to make the analysis more meaningful for the reader. This part of the questionnaire requested limited amount of information related to personal and demographic status of respondents.

The importance of demographic examination in this research is to describe the characteristics of the sample, like proportion of male and female, profession and educational background and experience of respondents in the pharmaceutical sector. Accordingly these variables are summarized and described in tables shown below.

Table 4.1 Respondents Demographic Informationn= sample size 100(the number of respondents100)

variable	category	Education	frequency	percentile
Gender	Female		30	28.5%
	Male		65	61.75%
	Total		95	
Education level	Level	PhD		
		MA	33	31%
		Degree	45	43%
		Diploma certificates	17	16%
Position		General Director	0	
		Deputy Director	1	1%
		Director	1	1%
		Expert	53	50%
		others	40	38%

Years of experience	< 3	29	28%
	3<6	38	36%
	6<11	16	15%
	>11	12	11%

Source: own survey result 2021

From the above table the first item of demographic characteristics is gender. The gender distribution of respondents of EPSA covers 61.75 % male while 28.5 % of the respondents covers female. This shows the gender distribution of sample is dominated by male.

Regarding educational background, 45(43%) of the respondents were at educational level of BA/BSC degree while 33(31%) of the respondents were at educational level of MA/MBA/MSc holders, 17(16%) were also diplomas. This shows the sample comprises professionals and sub-professionals. The fourth item was positions of respondents, regarding to this 22(36.7%) of the respondents were others (others for different experts like economist, management, accountant,

biologist and engineering) while 15(25) of them were , 13(21.67%) were logistics and supply chain and 10(16.67%) were chemists.

Most of the respondents in this study were experts 53(50%) with the highest number of participants, and secondly, with different professions(like case team leaders , Team leaders and officers) were 40(38%) while the number of participants was contained Deputy General Director and Director have less number of participants ,Therefore ,experts are the highest numbers next to different workers were involved the research participants.

Most of the work experience in pharmaceutical sector was 38 (28%) of them have 3to6 years while and 29 (28%) under 2 years of age. The number of those who have served at the institute for 6 to 10 years was 16(15%) relatively smalland 12(11%) have work experience of 11 years and above with a very small number over 11 years. From the above information the majority of respondents had served the company less than five years and this helped the researcher to measure the performance of past five years using the

4.2 . To what extent EPSA supply chain management

2.1	In terms of user satisfaction									
2.1	Consumer satisfaction is measured from time to time in terms of drug delivery	1	10.45	1	17.1	14	13.3	20	19	11.4
2.1	In EPSA Addis Ababa hub pharmaceuticals are Put-Away Accuracy in the correct location so they can be quickly and easily located.	6	5.7	1	11.4	33	31.35	27	25.65	16.15
2.1	The Drug Supply Agency has the experience to solve problems by exchanging information before drugs already passed	6	5.7	1	9.5	20	19	35	33.25	22.8
2.1	The organization regularly works in collaboration with staff and stakeholders to correct misconceptions.	8	7.6	1	9.5	18	17.1	39	37.05	19

2.1 .5	EPSA Addis Ababa hub has information exchange mechanisms other than letter and telephone calls	8	7.6	8	7.6	16	15.2	42	39.9	21	19.95
2.1 .6	Information is translated into the language in which the patient needs to have a better understanding of the medication he or she is using	9	8.55	20	19	34	32.5	20	19	12	11.4

Source of Table 2.2. In **terms of user satisfaction**

Client satisfaction can be defined as a personal evaluation of the patient on the health care services and providers, KikanmeLC(2006;2(4):499–511.) It is an integral component of the quality of health care. Donabedian (1992;3(5):123–125.) A. Satisfaction reflects the realities of care as well as the preferences and expectations of the patient. To ensure higher quality of pharmaceutical services and better outcomes, enhancement in the communication, convenience, and courtesy are important. High satisfaction promotes positive health behaviors, such as compliance and continuity with providers. Adhering to medication schedules and stability in visiting the same health care professionals are improved with higher satisfaction levels. According to the above Table 2.1 .The respondents were asked if there is developed tool to check customer satisfaction in the distribution of pharmaceuticals in EPSA AA branch 30% of respondents were both disagree and neutral . 20% of them were agreed, 16.7% strongly disagree and 11.4 % were strongly agree. . This indicates that the majority of the respondents disagreement that there was no as such a well-developed tool to check the customer satisfaction level in distribution of pharmaceuticals. This was consistence with the finding of the open questioners which results that the agency does not any tool to check customer satisfaction. This implies that EPSA AA hub did not any way to measure the level of customer satisfaction. .

According to Table 2 No 2 , 45 % of respondents were both disagree and neutral, 27(25.65) of the respondents answered that they agreed In EPSA Addis Ababa hub pharmaceuticals were as Put-Away Accuracy in the correct location so they can be quickly and easily located whereas 33(32.35%) of the

participants responded that they naturally Addis Ababa pharmaceutical were Put the proper place and easily located. Therefore, 12 (14.4) of the respondents responded that they disagreed the place were put away pharmaceutical Accuracy in the right location and they could be quickly easily located ,However, 6(5.7) of the respondents less frequently number of strong disagree this implies that EPSA Addis .Ababa hub pharmaceuticals were not correct location and they couldn't easily quickly to get the service.

Item number three focused on the Drug Supply Agency has the experience to solve problems by exchanging information before drugs already expired. With regarding to the question raise to respondents for information exchange among distribution officer ,store manager and customer respondents ;35(33.35) of the respondents answered that they Agreed the information exchanged to solved their problem happed during drug neared to expired as well as drage distributions , 24(22.8 %)of responds had given that strong information information exchanged. whereas 20(19%) of the participants responded the they natural what they could not understand or information about the drug supply agency has the experience to solved the problem by exchanging information before drug neared to expired : but 10(9.5%) of the participants responded that they disagree used to information exchanged during drugs neared to expired .As a result ,6(5.7%) less frequent used this Strong disagreed .from this result EPSA AA branch has good information exchange practice to improve distribution effectiveness. Respondent explains in open questioner there is good coordination with each other to decrease overstock, to use alternative medication and to minimize expiry of pharmaceuticals this implies that EPSA has strong information exchange with the branch hub before drug expired

Item number four was prepared to whether the respondents cooperated with the staff and stakeholders like used media to corrected misconception of the agency or improved drugs utilization by giving health education .According to the data in table 2. No 4 show that, 39(37.05%) of the respondents

responded that they agreed the agency regularly works in cooperated with staff and stakeholders to correct misconceptions how to used drug proper utilization .whereas; 20(19%) of the participants responded theystrongly agreed the agency tray to correct misconception or misunderstanding of drug utilization cooperated with staffed and others forums like media and public wings whereas, 18(17.1%) of the participants that gives naturally that means the respondents may not have enough knowledge about cooperated with to correct misconception. but 10 (99.5%) of the participants answered that they disagree the agency could not work correct misconceptions some respondents said that this was not the mandate of EPSA this is the role and responsibility of FMOH however,8(7.6) the respondents respondedless frequent used this Strongly disagreedcorrect misconceptions..

Regarding to use Information was translated into the local language for the patient needs to have a better understanding of the medication According to Table 2 No 5 , 51.5 % of respondents were both disagree and neutral this means that the Information was not translated into the local language , 32.5 % neutral on it , while 19% disagree that the agency does not use accurate information, Agreed in 19 % , and 9 % strongly disagreeing use of Information was translated into the local language. This result implies that the agency has not great job in using of language translated information for the patient needs to have a better understanding of the medication.

4.3. Meshure ere of Effieency

Time Indicators	SD		D		N		A		SA	
	The demand and request of customers' orders are filled on time and up on their request and expectation	12	11.4	25	23.75	29	27.55	17	16.15	12
EPSA Addis Ababa hub, Health facility and other branch is communicate to distribute over- stock and near expiry pharmaceuticals	11	10.45	17	16.15	29	27.55	33	31.35	5	4.75

The Pharmaceutical Supply Agency will make practical transactions by preparing the needs of the customers forecasting for the next year	9	8.5 5	33	31.35	25	23.75	20	19	8	7.6
Does the Drug Supply Agency seek solutions to suppliers' problems	6	5.7	13	12.35	13	12.35	35	33.2 5	28	26.6
EPSA has frequently measures and evaluates customer satisfaction	12	11. 4	35	33.25	13	12.35	28	26.6	7	6.65
	2	1.9	12	11.4	39	37.05	30	28.5 0	12	11.4

Source of Tebel 4.3. masher of efficiency

4.3. Regarding the efficient supply and distribution of medicines system the respondent 48 (45.6) agreed and 7 (6.65%) strongly agreed neutral respond were 18 (17.1) , 16 (15%) disagree and 6(5.7%) was strongly disagree. however ; most of the responded by saying that EPSA has a well established effective supply and distribution system , but FMOH Gide line national Good Dispensing Practice and Pharmaceutical Supply Chain Management training package has been reviewed using standardization review checklist and approved by the ministry in January, 2019. Common barriers to communication can be categorized under dispensing environment, patient factors, and time. . Dispensers should be aware and utilize effective strategies to improve communication but AMR forms nowadays one of the world`s most public health threats. It is increasing across the world while approaches in the area of new drug delivery system are declining. AMR has serious public health consequences. It increases mortality and morbidity from infectious diseases. It also increases treatment costs, illness duration and has many negative economic consequences. DTC have many roles in monitoring and improving medicines use in institutional settings to contain AMR and 16 (15.2) of those who responded said that there was no efficient system, and 6(5.7%) Therefore, most of the respondents had an efficient supply

and distribution system. EPSC has include its key suppliers in its planning and goal setting activities of pharmaceutical supply chain.

The Ethiopian Pharmaceutical Supply Agency (EPSC) said that 47 (45.65%) of the Pharmaceutical Chain were planning a joint plan agreed, and 15 (14.25) strongly agreed. On the contrary, responded saying that 20 (19). Neutral. And 8 (7.6) there was no joint planning and also 5 (4.75) strongly disagree said that they had no joint plan absolutely. According to recently, Ethiopia has prepared a strategic plan for the implementation of pharmaceutical traceability. However, little is

known how different stakeholders perceive and could react to this initiative. In the other way EPSC websitnews letter April 22, 2012 The Agency held a consultative meeting with 11 local pharmacists, the Ministry of Health, the Ministry of Trade, banks and other stakeholders on April 6, 2013. State Minister of Health, Alemtsehai Paulos, called on stakeholders to work together to alleviate the problems faced by local pharmaceutical manufacturers and suppliers. The combination of foreign exchange, rising commodity prices, raw material taxes, and operational and input problems has prevented us from producing at full capacity, the producers said. State Minister of Health, His Excellency Alemtsehai Paulos, said stakeholders cannot be effective on their own and that all stakeholders should take responsibility. In related news, State Minister of Trade, Teka Gebre, said the producers need coordinated support to produce medicines. He said the imported and licensed drugs are completely tax-free, adding that there should be a tax code on raw materials used to make medicines. therefore, the Agency should be continues stockholder involvement and develop ownership in the plan jointly Plan.

As shown in the above table2 the Agency's implement policies, regulations and guidelines the respondent response 34(32.5%) agree ,33(31.35%) neutral while 15(14.25%) Disagree and 6(5.7%) strongly disagree .Therefore, on a permanent basis.. According to Annual performase review meeting

deputy General director AtoTesfalem interview that review that review annual meeting his explanation Monitor and follow up the execution of agency wide strategic plan and annual plan, and evaluate their periodic performance; Oversee and monitor the development and implementation of operational guidelines, SOPs pertaining to activities under each directorate and hubs including Adama project Office; in addition to his explanations Coordinate and collaborate with FMOH, Regional Health Bureaus, Donors, partners and others to ensure successful implementation and strengthen the Agency's supply chain management; Monitor the implementation of appropriate warehousing, distribution, fleet management and maintenance policies and procedures to enhance efficiency; Follow up and support the implementation of GPS, CCTV, Incinerators and many other key initiatives.

EPSA addresses the specific questions of the Public comments According to the data in the above table 37(35.15) the participants most respondents responded that they answered that agree the public comments address. Whereas 20(19%) of the respondents answered that neutral,18(17.1)of the participants answered that they disagree the public comments address in order to 11(10.45) of the participants responded that they strongly disagree address the concerns of the public comments even if the respondents agreed address the public comments but , Board members of the Ethiopian Pharmaceutical Agency review the agency's 9 month plan performance on April 15, 2013 report the availability of to archive only 75% of public needs.

According to table respondents responses on time to receive an order.35% agree,30% were neutral,22.2%of respondents disagree,5.6% strongly agree and 6.7% were strongly disagree. From the result of the respondent in the agency the response time to receive an order in performed in good performance. However because of their problems in quantification either in EPSA and health facility, quality problem in refilling RRF, and long time stock out of chemical reagents which needs more effort.

The demand and request of customers' orders are filled on time and up on their request and expectation delivery of pharmaceuticals on time, which were ordered by health facility or not 23.75% disagree, 11.4% strongly disagree on time delivery that there were delays in delivery, 27.2% agree, 11.4% strongly agree that there are the delivery was on time delivery whereas 27.55% of respondents responds neutral. This study done by John show, Incorporated(2019) shows in EPSA AA hub 58.8% which indicates pharmaceuticals are not reach to health facility on time. This results aliens with this study. Also from Respondents describe their opinion during open ended questioner because of different reasons such as shortage of cold chin vehicles, off-road, there is no accurate schedule time for distribution of pharmaceuticals to health facility, the agency has not delivered up on time.

2. The Majority of respondents 33.3% and 31.1% were agreed and neutral concerning the communication to distribute over-stock and near expiry pharmaceuticals with in branch to branch, branch to health facilities. Whereas 21.1% 10%, 4.4% were disagreeing, strongly agreeing and strongly disagreed respectively. This result indicates EPSA AA hub is strong communication practice with other branch and health facility to minimize over stock and to decrease to expiration of pharmaceuticals. Which is consistence with the finding of the open ended which concluded that the branch has done its effort to distribute over –stock and near expiry pharmaceuticals.

Table number 3 focused on asses the respondents Pharmaceutical Supply Agency will make accurate transactions by preparing the needs of the customers forecasting for the next plan .According to the data in the above table. 23.75% of the participants respond that neutral that accreted the preparation need forecasting. 31.35 % disagreed, 8.55% strongly disagreed while 6.55% less frequency number of Strongly agreed. This impaled that the agency has not accurate forecasting the need of customers then from the interview open ended equations the agency main challenge described that did not balanced the supply and the demand needs.

From the table 3.Number 4. was the Drug Supply Agency seek solutions to suppliers' problems according to the above data 59.8% both agreed and strong agreed the agency have a lot of problem solve during the supply side problem while the respondents responded 12.35 disagree and 5.7% strongly disagreed .this imply that the agency have good commitment to solve suppliers side challenges Item number five EPSA has frequently measures and evaluates customer satisfaction both the respondents neutral and disagreed responded that 45.6 % that did not frequently measurement in the agency whereas 33.25% of the participants usually both agreed and strongly agreed. 12.35% neutral and 11.4% strongly disagreed. This implied that less number for frequently strong agreed but most of the respondents disagree the agency couldn't regular measured customer satisfaction .even if the interviewer and most of the respondent contradicted answers the agency did not functional regular measured customer satisfactions

As can be seen in table above respondents were asked whether EPSA AA branch willing to prompt corrective action for defective pharmaceuticals 38.9% were agree that the agency willing to prompt correction action, 32.2% neutral, 13.9%disagree, 8.9% strongly disagree, 5.6% strongly agree. And open ended questioner respondent describe that the agency not only willing to prompt corrective action but also support technically.

4.4 . .supply chain communication challenge

major supply chain communication challenge	SD		D		N		A		SA	
to what extant leaders solve any problem with staff	10	9.5	21	19.95	23	21.85	13	12.35	10	9.5
to what extent the All staff have equal understanding about agency vision, mission and implementation of the goal.	10	9.5	17	16.15	22	20.5	24	22.8	4	3.8
Top management support &	7	6.	1	18.0	17	16.1	15	14.2	6	5.7

commitment pharmaceutical supply chain management the agency have increased the productivity		6 5	9	5		5		5			
To what level drug wastage in the hub	6	5. 7	1 3	12.3 5	13	12.3 5	25	23.7 5	18	17. 1	
EPSA has regularly to teach misunderstanding through media	1 2	1. 4	2 9	27.5 5	13	12.3 5	20	19	5	4.7 5	
EPSA have protect cruise management before happened the problems	2	1. 9	1 2	11.4	60	57	32	30.4	14	13. 3	

Sours Tebel 4.4. Supply Chain Communication Challenge

According to the data in the above table 4 21.85 % of the respondents responded that they neutral, 19.95% disagreed, 9.5% strongly disagreed while 12.35% agreed that Leaders solve any problem with the staffs but 9.5 less number of frequency strong agreed . The result of this implied that the agency could not solve the problem with staffs but in the interviewer give answered most of the staffs raised any question as much as possible we will addressed there issues .

Item number two was designed to investigate the All staff have equal understanding about agency vision, mission and implementation of the goal or not .According to the above table ,22.8% agreed,16.15% neutral,9.5% strong disagreed, whereas 3.8% strong agreed this was less number of frequent .this implied that most of the agency staffs have clear common vision and goal.

Item number three was top management continues supportive and assisted the result of agency employees have been improved productivity based on this data four number three show that respondents responded 18.05% disagreed, 6.65% strongly disagreed,16.15% neutral whereas 14.25%

agreed and 5.7% strongly disagreed. the result of this implied most of the respondents respond disagree the top management not involved the staffs activity and couldn't common goal

Item number four was identify whether the respondents known drug wastage in the hub or not .according to the data in the above table 23.75% of the respondents responded that they agreed According to the interviewer said that the agency drug wastage in the hub 1.5% expired but annually 2% expectation .

4.5 .Discussion on the Pharmaceutical Supply contractual

The interviewees on the question asked three directors were interviewed the first PRCD ,Agreement director,And deputy Directors EPSA.

The research prepared Nin interview questions for the sample Directorates so as to find their experience about the effectiveness of communications through using communication strategic also asses the drawback of Pharmaceutical supply chain communication

Totally the interview was conducted for 1:30 hours and in this section the responses of the head /higher official of the organization..

The first interview questions was made to know the interviewees set

What the over view of Ethiopian Pharmaceuticals Supply Agency (EPSA)

Ethiopian Pharmaceuticals Supply Agency, EPSA, is legal entity established under the law of Federal Democratic Republic of Ethiopia Government to overcome the problems and assure uninterrupted supply of pharmaceuticals to the public at an affordable price. The Pharmaceuticals Fund and Supply Agency was established in September 2007 by Proclamation No. 553/2007 as part of Pharmaceutical Logistic Master Plan implementation with the following objectives: i. To enable public health

institutions to supply quality assured essential pharmaceuticals at affordable prices in a sustainable manner to the public; ii. To play a complementary role in developmental efforts for health service expansion and strengthening by ensuring enhanced and sustainable supply of pharmaceuticals; iii. To create enabling conditions for enhancing the accumulation of funds in its revolving and cost recovery process and thereby ensure the realization of the objectives VISION To be the most responsive and efficient pharmaceutical supply chain organization in Africa MISSION “Ensure sustainable supply of quality assured pharmaceuticals to health facilities at affordable price through establishing committed demand, pooled procurement, robust inventory management and distribution, efficient financial management, integrated management information system, and attracting and retaining motivated and competent workforce.”

4.5.2. What are the major activity to fulfilled the mission

According to his explanation EPSA is Located in Addis Ababa and EPSA’s Head Office coordinates the activities of the nineteen branches and the seven clusters they are grouped into. Acting as the EPSA centre of pharmaceutical affairs in the country, the head office procures and distributes pharmaceuticals, medical supplies, medical equipment and laboratory reagents from local and international manufacturers to its nineteen hubs that in turn reach over 4,000 medical facilities located in all corners of the country. The Head Office also manages contracts with various local and international companies.

Cognizant of the numerous factors that have changed since the establishment of the Agency near the onset of the new millennium, the Head Office has restructured itself to fit better with the current reality in the country. With the huge rise in the country’s population and the subsequent surge in the demand for pharmaceuticals, the Head Office has equipped itself with twenty directorates.

4.5.3. What are the main challenges of the EPSA

The losses incurred by the Agency due to the fact that the placement purchased by the Planters was not fully taken away by the health facilities.

4.5.3.1..A lack of coordination

The availability of CBC and chemistry machines allowed up to 47 types of tests per sample. However, there was a lack of coordination, knowledge gaps and lack of laboratory fees. The lack of performance of local drug suppliers has led to fragmented supply of drugs in the country and the challenges and problems faced by suppliers.

4.5.3.2. Less performance of Local Suppliers

The agency has procured 109 drugs at a cost of 890 million birr and provided them to health facilities during the budget year, but so far 25 drugs have been supplied from local suppliers at 140 million birr, which is estimated to be 23%. It is stated that the presence of unpaid hospitals is due to the high pressure on the agency's supply of medicines and that the remaining money should be collected in consultation with the Ministry of Health.

1. Timely un collected revenue

It is stated that the presence of unpaid hospitals is due to the high pressure on the agency's supply of medicines and that the remaining money should be collected in consultation with the Ministry of Health.

4.5.4. Can you describe the strengths and weaknesses of communication in the Agency's drug supply and distribution?

4.1. Strength

Coordinate and collaborate with FMOH, Regional Health Bureaus, Donors, partners and others to ensure successful implementation and strengthen the Agency's supply chain management

Monitor and follow up efficient commodity tracking, receiving, and inventory management system that allow commodities to be distributed for hubs and health facilities

Provide mentorship and supportive supervision on key supply chain operations to branch offices in collaboration with partners;

Follow up and support the implementation of GPS, CCTV, Incinerators and many other key initiatives

The agency communicator used multiple communication tools and channels to reached out to its target audience. Like social media, updated website utilization and Telegram

1.2. Weakness

According to AtoNahu Explanation that the study has shown that Ethiopian Pharmaceuticals Supply Agency faced logistics management challenges that affected its organizational performance to a great extent as shown. As the study proved, foreign currency shortage was the most critical challenge an others followed by lack of collecting receivables ,lack of modern management techniques, poor exchange of information, lack of integrated system, increasing logistics cost, insufficient logistics management capacity, and inability to access and apply the growing logistics knowledge base were the other most experienced challenges Lack of accuracy of quantification/forecasting,

According to the interview result of some product delivered lately against their schedule. This will result delay delivery of pharmaceuticals for end customers. The main reasons mentioned were shortage of vehicles, Campaign, Emergency delivery, road and climate problem and separate location of head office warehouses. To reduce this agency is in the process of buying heavy load vehicles and building

off large volume ware house inside the head office. Literature also stated that the main Challenges of pharmaceuticals supply chain of African Countries are poor information, communication and consumption data, inadequate storage facilities and a lack of management procedures, pure selection and quantification of demand, a Lack of transparent procurement procedures, inadequate storage facilities and capacity, lack of guidelines for good storage procedures, a lack of appropriate planning, monitoring and evaluation and inadequate budget allocation (Prof. Allan Woodburn (2013)).

5. Pharmaceutical Supply chain is there any communication work to prevent fraud in the procurement of medicines and medical equipment?

The Interviewer said about it the AGENCY experience to prevent fraud there have different a system Implemented. According to (Gunasekaran & Kobu, 2007) said that "the. Performance measures enable a more open and transparent communication between people lead to a co-operative work environment hence improved organizational performance".

The interviewer responds his experience of to prevent fraud first Open and transparent for any procurement purchasing process based on the rule and regulation, second-Involved Regulatory body during Bid Purchasing process and third Use updated Technology increases participants. EPSA used all the above Method .to prevent wastage.

CHAPTER FIVE:

5.SUMMARY OF FINDINGS,AND CONCLUSIONS

5.1 SUMMARY OF FINDINGS

This final chapter contains the study summary and conclusion with regards to The Drawback of Pharmaceutical Supply Chain Communication a Case of Ethiopia Pharmaceutical Supply Agency/EPISA. The chapter looks at the study summary and presented the conclusion of the study based on the results of the analysis. The study's evident limitations of the study and its recommendations are also presented.

In order to achieve these objectives, data were collected from the employees and active customers of AA Federal Hospitals . The data were processed in qualitative and quantitative approaches and analysis was also used.

5.1 Summary of the study

Based on the analysis and interpretation of data in chapter 4 of this research work, the Following findings were made:

- From the demographic characteristics of respondents' the dominant percentage were male (75%) and the remaining (25%) were female respondents.
- From the interview and physical observation the researcher observed that the agency does have a system that focuses long term relationship with suppliers and ICT infrastructure and better communication system.

5.1.1. Strategic Supplier Partnership communication

- EPSA has a well established effective supply and distribution system 75% of the respondents responded believe from the but most of the written documents including WHO Assessment of pharmaceutical supply accessibility in developing country Access 1 to safe, effective and quality medicines and vaccines for all is one of the targets of the Sustainable Development Goals.2 Achieving universal health coverage requires access to safe, effective, quality and affordable essential medicines and vaccines. Access is a global concern in view of the: rising prices of new medicines that place increasing pressure on the ability of all health systems to provide full and affordable access to health care; persisting problems of shortages and stock outs of essential medicines, especially for noncommunicable diseases, and vaccines; and increasing numbers of substandard and falsified medical products that pose an unacceptable risk to public health. In addition, problems such as antimicrobial resistance and opioid misuse highlight the need to improve appropriate use of medicines. WHO 70 world Assamble presentation 19 March 2018
- Ethiopia has prepared a strategic plan with the stakeholders for the implementation of pharmaceutical traceability. However, stakeholders did not work together to alleviate the problems faced by local pharmaceutical manufacturers and suppliers. The agency workers most of respondents award baseness addresses the specific questions but, I reviewed the documents such as Board members reports have less performance 9 month performance plans on April 15, 2013E.C, report the availability of to archived only 65% of public needs

5.1.2. clintes

Majority of the respondent disagreement that there was no as such a well-developed tool to check the clintes satisfaction level in distribution of pharmaceuticals.

- EPSA Addis .Ababa hub pharmaceuticals were not correct location and they couldn't easily quickly to get the service
- EPSA has strong information exchange with the branch hub before drug expired

- Most of the respondents were agree the agency used media to corrected misconception of the agency or improved drugs utilization by giving health education
- Information was translated into the local language for the patient needs to have a better understanding of the medication According to of respondents were both disagree and neutral this means that the Information was not translated into the local language
- on time to receive an order their problems in quantification either in EPSA and health facility, quality problem in refilling RRF, and long time stock out of chemical reagents which needs more effort
- the agency has a lot of problem solve during the supply side but, the agency did not functional regular measured customer satisfactions, the agency has not accurate forecasting the need of customers then from the interview open ended equations the agency main challenge described that did not balanced the supply and the demand needs.
- Concerning the communication to distribute over-stock and near expiry pharmaceuticals with in branch to branch, branch to health facilities have done its effort to distribute over –stock and near expiry pharmaceuticals and then the agency did not functional regular measured customer satisfactions , EPSA AA branch willing to prompt corrective action for defective pharmaceuticals
- And most of the agency staffs have clear common vision and goal. drug wastage in the hub has less the expectation of standards and the top management not involved the staffs activity and couldn't common goal.

5.1.3. The main challenges of the EPSA

The main challenges of the EPSA, lack of coordination,. Less performance of Local Suppliers only estimated to be 23% avilable from local pharmacy , and Timely un collected revenue .In addition to foreign currency shortage was the most critical challenge an others followed by lack of collecting

receivables , lack of modern management techniques, poor exchange of information, lack of integrated system, increasing logistics cost, insufficient logistics management capacity, and inability to access and apply the growing logistics knowledge base were the other most experienced challenges Lack of accuracy of quantification /the main his new pharmaceutical organizations improve the efficiency and effectiveness of their internal and external communication approaches and processes.problem of EPSA has external and internal communication problem Internal communications team: sending general news and updates, policies, procedures and various employee engagement-related emails.communication. external communication gap was there is no updated information about especially there was not integrated social media and website utilization .

5.2. Conclusion

Based on the findings the following conclusions are drawn;

This study sharing information is essential for organizations to learn from each other in the supply chain. The opportunity to learn from others can encourage continuous improvement of the supply chain communication. From the findings of this study, it can be concluded that: the effectiveness of pharmaceutical distribution in terms of quality, safety and time by Storage and inventory control practice, Order fulfillment, communication, customer service management, Transportation and distribution system with

The study found A very positive finding is that EPSA AA hub that there were EPSA have a well established effective supply and distribution system , pharmaceuticals store in appropriate correct location, quickly and easily easily located., well exchanging information ,have strong stockholder collaborations used public media for correct misconceptions., had effective implemented policies, regulations and guidelines on a permanent basis. And 75% Addressed public communities .but, did not Clients have understand drug instruction by own language translations.

pharmaceuticals are not done on time, they need of communication for other organizations that did not on time receiving and did not affordable price pharmaceuticals, the agency could not known customer supply forecasting plan, have not regularly measured and evaluated customer satisfaction but, they have strong system for Health facility and other branch was communicate to distribute over- stock and near expiry pharmaceuticals and have effective problem solved by supplier side and then effective corrective action for immediate defectives pharmaceuticals .

Communication challenge in the pharmaceutical supply chain destructions lack of coordination,. Less performance of Local Suppliers only estimated to be 23%.available from local pharmacy ,and Timely un collected revenue .In addition to foreign currency shortage was the most critical challenge and others followed by lack of collecting receivables ,lack of modern management techniques, poor exchange of information, lack of integrated system, increasing logistics cost, insufficient logistics management capacity, and inability to access and apply the growing logistics knowledge base were the other most experienced challenges Lack of accuracy of quantification/forecasting .

leaders have not effective problem solved towered internal communications and the agency have equal understanding about their vision, and mission in addition to pharmaceutical supply chain the agency have not strong productivity, drug wastage in the hub was less 1.5% the WHO standards recommended 2%. Crisis management have good practice in the agency because covid 19 EPSA has properly manage to equipped any essential medical supply and equipments during the short time.

5.3 Recommendation

Based on the above findings and conclusions of the study the following recommendations were forwarded to the Ethiopian Pharmaceuticals Supply Agency managements.

- ❖ Coordination is one type of communication of pharmaceuticals that affects the performance of EPSCAA hub. Therefore, EPSCAA hub should coordinate the actions of various departments involved in the drug selection, quantification, procurement and distribution of pharmaceutical products and the health facilities. This will provide better visibility and control in the system which will help in tracking the products and tracing the real evidence based requirements of the of the public.
- ❖ Customer satisfaction is an important measure of how well services are provided in availability of products in the pharmacy attended in EPSCAA Addis Ababa hub
- ❖ pharmaceutical dissatisfaction with the quality of patient care in public health facilities .the agency should increase the availability of essential and affordable price.
- ❖ In modern supply chain Communication plays pivotal role, so the agency should develop standard operation manual which shows formal communication mechanism for internal and external stake holders.
- ❖ Loading of pharmaceuticals separately for separate health facility based on the distance where they are located will reduce; wastage of time, mixing of products and facilitate easy delivery of the required items. So the agency shall apply partitioning practice to load pharmaceuticals. To reduce distribution challenges which are faced during receiving the agency should work in coordination with regional health offices, woreda health offices and health facilities.
- ❖ The study established that the key logistics management challenges faced by Ethiopian Pharmaceuticals Supply Agency were shortage of foreign currency, lack of collecting receivables, lack of accuracy of quantification/forecasting, lack of integrated system, poor exchange of information and increasing logistics cost. The study recommends that Ethiopian Pharmaceuticals Supply Agency applies the following:

- Closely work with concerned government bodies and banks to prevent shortage of foreign currency.
- Exert more efforts to collect receivables from customers based on planning of collecting receivables using different mechanisms including harmonizing diplomacy.
- Apply proper and accurate need assessment and forecasting by investing or putting more efforts to work closely with concerned bodies (service delivery point namely health facilities).

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ANNEX I:

QUESTIONNAIRE OF THE SURVEY

1. QUESTIONNAIRE

Addis Ababa University school of Journalism and Communication, Department of Public Relations and Strategic Communication for the MA thesis. this questionnaire is designed to collect data from EPSA and some referral hospitals in Addis, the research title the drawback of pharmaceutical supply chain communication & distribution of in Ethiopia pharmaceutical supply Agency/EPSA The questions have three parts: demographic information, ratings, and in-depth interviews. The questionnaire is anonymous and will only be used for academic purposes and will not be compromised under any circumstances. Therefore, an accurate, clear and timely response is essential to the success of the study. Finally, I respectfully ask you to answer each question carefully. Thank you.

PART I: Demographic Information:

PART A Kindly respond to the question by ticking the most appropriate response you think

1. Gender Male Female
2. The highest academic qualification you achieved College certificate Diploma Bachelor Master's degree Others specify _____
3. Job title: 1) CEO/President /Vice President 2) Director 3) Manager 4) Other
4. Years service at the organization: 1) Less than 2 years 2) 2–5 years 3) 6–10 years 4) Over 10 years

Part II: please tick (√) the appropriate number to indicate the extent to which you agree or disagree with each statement. The item scales are five-point Likert type scales with 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

Table 2 .To what extent EPSA supply chain management

2.1	In terms of user satisfaction	SD	D	N	A	SA
2.1 .1	Consumer satisfaction is measured from time to time in terms of drug delivery					
2.1 .2	In EPSA Addis Ababa hub pharmaceuticals are Put-Away Accuracy in the correct location so they can be quickly and easily located.					
2.1 .3	The Drug Supply Agency has the experience to solve problems by exchanging information before drugs already passed					

2.1 .4	The organization regularly works in collaboration with staff and stakeholders to correct misconceptions.					
2.1 .5	EPSA Addis Ababa hub has information exchange mechanisms other than letter and telephone calls					
2.1 .6	Information is translated into the language in which the patient needs to have a better understanding of the medication he or she is using					

Table 2 Quality Indicators

	Time Indicators	SD	D	N	A	SA
	The demand and request of customers' orders are filled on time and up on their request and expectation					
	EPSA Addis Ababa hub, Health facility and other branch is communicate to distribute over- stock and near expiry pharmaceuticals					
	The Pharmaceutical Supply Agency will make practical transactions by preparing the needs of the customers forecasting for the next year					
	Does the Drug Supply Agency seek solutions to suppliers' problems					
	EPSA has frequently measures and evaluates customer satisfaction					
	EPSA are willing to prompt corrective action for defectives pharmaceuticals					

Table 4. supply chain communication challenge

	major supply chain communication challenge	SD	D	N	A	SA
	to what extent leaders solve any problem with staff					
	to what extent the All staff have equal understanding about agency vision, mission and implementation of the goal.					
	Top management support & commitment pharmaceutical supply chain management the agency have increased the productivity					
	To what level drug wastage in the hub					
	EPSA has regularly to teach misunderstanding through					

media					
EPSA have protect cruise management before happened the problems					

Organizational data:

1. What are the barriers that hinder the communication flow in your organization?
2. Do you face any language barrier to communicate suppliers from different countries?

Table 1.	Strategic Supplier Partnership communication	SD	D	N	A	SA
1.1	EPSA has a well established effective supply and distribution system					
1.2	EPSA has include its key suppliers in its planning and goal setting activities of pharmaceutical supply chain					
1.3	To what extent efforts are being made to implement the Agency's policies, regulations and guidelines on a permanent basis.					
1.4	EPSA will quickly address the concerns of the public communities					

3. Do these middle managers get support from their seniors? If yes, to what level?
4. How integrated do you believe communication is in the organization?
5. What are the communication strengths and weaknesses of your organization?
6. What is the organization doing to improve communication?
7. If the communication associated with your job could be changed in any way to make you more satisfied, please indicate how.

Thank you!!!

Amharic

ANNEX I:

ስሜአለም ሰገድ ጫኔ እባላለው በአዲስ አበባ ዩኒቨርሲቲ የጋዜጠኝነት እና የኮሙኒኬሽን ዲፓሎማ ፓርትመንት የህዝብ ግንኙነት እና የስትራቴጂክ ኮሙኒኬሽን ለ2ኛ

ዲግሪ ሚ. ም. ጥናት በማድረግ ላይ የምገኛ ሲሆን የዚህ ጥናት ዓላማ በኢትዮጵያ መድኃኒት አቅርቦት ኤጀንሲ የመድኃኒት አቅርቦት ሰንሰለት እና ስርጭት ላይ የሚታይ የኮሙኒኬሽን ማነቅ መለየትና መፍትሄ መስጠት ነው። ይህ መጠየቅ በዋናነት በኢትዮጵያ መድኃኒት አቅርቦት ኤጀንሲ በከፊል በአዲስ አበባ ፌዴራል ሆስፒታሎች መረጃ ለሚሰበሰቡ ተሳቢዎች ለማድረግ የተዘጋጀ ነው። ስለሆነም ጥያቄዎቹ ስትክፍሎች አሏቸው፣ የጥናቱ ተሳታፊ የግል መረጃ፣ ደረጃ መስጠት እና ጥልቅ ቃለ መጠይቅ ናቸው። ጥያቄውን ሲሞሉ ስምዎን መጻፍ አያስፈልግም ጥናቱ ለአካዳሚክ ዓላማ ብቻ የሚውል ሲሆን እና እርስዎ የሚሰጡት መረጃ ለጥራት የሚጠበቅ ይሆናል። በማንኛውም ሁኔታ ላይ ተጽዕኖ አያሳርፉም። ስለዚህ፣ ትክክለኛ፣ ግልፅ እና ወቅታዊ ምላሽ ለጥናቱ ስኬታማነት በጣም አስፈላጊ በመሆኑ ለእያንዳንዱ ጥያቄዎች በጥንቃቄ እንድትመልሱ ልኝ በአክብሮት እጠይቃለሁ። ስለትብብር ያለው ሚያ አመሰግናለሁ።

ክፍል I: የጥናቱ ተሳታፊዎች የግል መረጃ:

እርስዎ የሚያስቡትን ተገቢውን ምላሽ X "ምልክት በማድረግ ለጥያቄው ትክክለኛ መልስ ይስጡ"

1. የታወቀው ----- ሴት -----
2. የትምህርት ደረጃ:- ፒ.ኤች .ዲ.----- ማስተርስ---- የመጀመሪያ ዲግሪ--ዲፕሎማ----- ስርተፍኬት---- ሌሎች -----
3. የሥራ መደቡ መጠሪያ 1 ጄነራል ዳይሬክተር □ 2. ምክትል ዳይሬክተር □ 3) ዳይሬክተር □ 4.) ሥራ አስኪያጅ □ 4) ኤክስፐርት □ 5) ሌላ □
4. በድርጅቱ ውስጥ ለምን ያህል ጊዜ አገለገሉ -1) ከ 2 ዓመት በታች □ 2) ከ3-5 ዓመት □ 3) ከ6- 10 ዓመት □ 4) ከ 10 ዓመት በላይ □

ክፍል II

እባክዎ ንብረትን እያንዳንዱ መግለጫ ምን ያህል እንደሚሰማው ወይም እንደሚሰማው ለማመልከት ትክክለኛውን ቁጥር ምልክት ያድርጉ (tick)። የንጥል አሰጣጡ አምስት አይነትን ጥብብ ደረጃዎች አሉት 1 = በጣም አልሰማም፣ 2 = አልሰማም፣ 3 = ገለልተኛ፣ 4 = እስማማለሁ፣ 5 = በጣም እስማማለሁ

ክስትራቴጂክ አካሄድ	1	2	3	4	5
1.1 የመድኃኒት ቀልጣፋ አቅርቦትና ስርጭት አሰራር ተዘርግቷል					
1.2 የኢትዮጵያ መድኃኒት አቅርቦት ኤጀንሲ የመድኃኒት አቅርቦት ሰንሰለት እቅድ ላይ ባለድርሻ አካላትን በማካተት በጋራ ያቅዳል					
1.3 በኤጀንሲው የሚወጡ የማስፈፀሚያ ሊሲዎች፣ ደንቦችና መመሪያዎችን በቋሚነት እስከ ታች ድረስ ተግባራዊ ማድረግ አካሄድ የሚታየው ጥረት አጥጋቢ ነው።					
1.4 በመድኃኒት አቅርቦት ኤጀንሲ ህዝቡ የሚሰጠውን አስተያየት መነሻ ባሆነ ለማድረግ የሚታዩ ጥያቄዎችን በቀላሉ ያርማል					
2. የመድኃኒት አቅርቦት ኤጀንሲ የመድኃኒት አቅርቦት ሰንሰለት አስተዳደር የኮሙኒኬሽን ስልጠና ተወስኗል					
2.1 ከተጠቃሚዎች እርካታ አንፃር	1	2	3	4	5
2.1 መድኃኒት ከማቅረብ አካሄድ የተጠቃሚ እርካታ በየጊዜው ይለካል					
.1					
2.1 የመድኃኒት አቅርቦት ማሰራጨት መድኃኒቶች በፍጥነት እና በቀላሉ የሚገኙ ለደንበኞችም ተሳታፊ አለ።					
.2.					

2.1 .3.	የመድኃኒት አቅርቦት ኤጀንሲ በቅርንጫፎች ከመጠን በላይ የተከማቹ ጊዜያቸው ከማለፈቸው በፊት መድኃኒቶች አስቀድሞ መረጃ በመለዋወጥ ችግሮችን የመፍታት ልምድ አለው					
2.1 .4.	ድርጅቱ የተዛቡ አመለካከቶችን የሚያስተካክልበት በየጊዜው ከሰራተኛው እና ከባለድርሻ አካላት ጋር የኮምዩኒኬሽን በትብብር የመመካከር ይሰራል					
2.. 1.5	ከስልክና ከደብዳቤ በተጨማሪ በሌሎች ምክንያቶች ከሽንገይ ወይም በመደሃኒት ስር ጭትና ክምችት መረጃ ለውጥ ይከሄዳል					
2.1 .6	ታካሚው ስለሚጠቀመው መድኃኒት በቂ የሆነ ግንዛቤ እንዲኖረው በሚገባው ቋንቋ መረጃዎች ተተርጉመው ለትይቅርቡ ለታል					
2.2 .	የግዜ አጠቃቀም	1	2	3	4	5
2.2 .1	የደንበኞች የአቅርቦቱ ጥያቄ በወቅት ምላሽ ይገኛል					
2.2 .2	በፍጥነት የሚፈለጉ መድኃኒቶች እና አልፎ አልፎ የሚፈለጉ ምርቶች ተለይተው በወቅቱ ጥቅም ላይ ይውላል?					
2.2 .3	የመድኃኒት አቅርቦት ኤጀንሲ ለቀጣይ አመት የደንበኞችን ፍላጎት ከቅድመትን ሲያዘግጅ ተጠቃሚዎች ለግብራዊ ግብይት ይፈጸማል					
2.2 .4	የመድኃኒት አቅርቦት ኤጀንሲ የአቅራቢዎች ችግር በሚያጋጥማቸው ወቅት ችግራቸውን ለመፍታት መፍትሄ ይፈልጋል?					
2.2 .5	ኤጀንሲው ጊዜውን ጠብቆ አሰራርን ከባለድርሻ አካላት ጋር ይገመግማል					
2.2 .6	የመድኃኒት አቅርቦት ኤጀንሲ በተደጋጋሚ የሚነሱ ችግሮችን መፍትሄ ይሰጣል?					
3	የመድኃኒት ማሰራጨት አቅርቦት ሰንሰለት የኮምዩኒኬሽን ዋና ዋና ችግሮች?	1	2	3	4	5
3.1	በሠራተኞች ላይ የሚያጋጥሟቸውን ችግሮች አመራር ተረድቶ ችግሮችን ይፈታል?					
3.2	የኤጀንሲው ሰራተኞች እና ሌሎች ተቋማት በመድኃኒት አቅርቦት ሪዕይ ፣ ተልዕኮ ለማሳካት የባለቤትነት ስሜት ከመፍጠር ፣ ከማሳተፍና ግልፃዊ አሰራር ከመፍጠር አኳያ የሚደረገው ጥረት በቂ ነው					
3.3	የከፍተኛ አመራር ድጋፍ እና ወሳኔ ሰጭነት የመድኃኒት አቅርቦት ሰንሰለት አስተማማኝነት ደረጃ አድርጎታል					
3.4 .	በመድኃኒት ማከማቻ መጋዘኖች የመድኃኒት ብክነት አለ					
3.5	የመድኃኒት አቅርቦት ኤጀንሲ በተለያዩ የሚደረጉ የመድኃኒት አጠቃቀም ላይ የግንዛቤ ትምህርት ይሰጣል					
3.6	ድንገተኛ አደጋ በአገሪቱ በሚከሰትበት ወቅት በኤጀንሲው በቶሎም ልሽ የመስጠት አቅም /ልምድ/ አለው					

ስለትብብር ዎን እና መሰጠት !!

ANNEX II

የዳሰሳጥናቱመጠይቅ

ቃለመጠይቅ

ክፍልሁለትድርጅታዊመረጃይህየሚሞላውበኤጀንሲውዋናዳይሬክተር፣ምክትልዳይሬክተር፣በኮምፒዩተርናሳይንስ፣የመድሃኒትአቅርቦትናአከፋፋይዳይሬክተርብቻናቸው፡፡

1. የኤጀንሲውተግባርናሃላፊነትንቢያብራሩልን?

2. ኤጀንሲውተልኮውንከመወጣትአኳያእያደረገያለውንጥረትቢያብራሩልን?-----

3. በኤጀንሲውስጥያለውንየመድሃኒትአቅርቦትናስርጭትየኮምፒዩተርናሳይንስአንቅፋትየሚፈጥሩቸዎቻቸውንምንምንናቸው?-----

4. በኤጀንሲውየመድሃኒትአቅርቦትናስርጭትውስጥየኮምፒዩተርናሳይንስንካፊዎችእናድክሞቶችቢገልጹልን?-----

5. የመድሃኒትአቅርቦትድርጅትየመድሃኒትናየህክምናመሳሪያግዥመጭብርበርእንዳይከሰትከኮምፒዩተርናሳይንስአኳያየተሰራሰራአለብለው ያምናሉመልስዎአዎከሆነበዝርዝርቢገልጹልን.....

6. በኤጀንሲውስጥየኮምፒዩተርናሳይንስአሰራርለማሻሻልምንመደረግአለበትብለውያምናሉ?

ስለትብብርዎእናመሰግናለን !!