

**ASSESSMENT OF PHARMACEUTICALS PROCUREMENT PRACTICES
AND CHALLENGES: THE CASE OF CENTRAL ETHIOPIAN
PHARMACEUTICALS SUPPLY AGENCY.**

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This is to Certify that the thesis prepared by *Seifu Moges Asnakew* entitled “*Assessment of pharmaceuticals procurement practices and challenges: the case of Ethiopian Pharmaceuticals Supply Agency*” submitted in partial fulfillment of the requirements for the degree of Master of Art in Logistics and Supply Chain Management complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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ABSTRACT

The main objective of the study was to assess pharmaceuticals procurement practices and challenges of Ethiopian Pharmaceuticals supply agency. The study was conducted to examine the practices of good pharmaceuticals procurement practices, procurement planning, supplier relationship management practices and most procurement challenges of the agency. Descriptive research design was used in executing the study. The targeted group of the study was procurement staffs who are working on procurement process. 57 staff members were participated in this particular study, purposive sampling techniques was used to select number of samples. Primary data was collected using questionnaire and interview guidelines. Based on this, majority of the respondents was strongly agreed (43.9%) that all products are procured with their generic names. 70.2% of the respondents said that procurement is made from pharmaceuticals procurement list of the agency. 52.6% of respondents disagreed on the statement that requested quantities for procurement are based on reliable estimate of actual need. More than half of the respondents (50.9%) said that there is a high level of commitment between the agency and its suppliers but 54.4% of the respondents replied that the agency didn't classify its suppliers based on a well-defined set of criteria. The most top pharmaceuticals procurement challenges of EPSA were lengthy procurement process, inaccurate quantification/forecast data, weak collaboration with stakeholders, delay funding allocation or release and Inadequate rules, regulations, and structures for pharmaceuticals procurement.

Keywords: planning practices, supplier relationship management, good pharmaceuticals procurement and procurement challenges.

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Table of Contents

List of Tables	vii
List of Figures	vii
Abbreviation and Acronyms	viii
Operational definition	x
Chapter one	1
Introduction	1
1.1 Back ground of the study	1
1.2. Background of the Organization	2
1.3 problem of the statement.....	3
1.4 Research objective	5
1.4.1 General objective	5
1.4.2 Specific objectives.....	5
1.5 Research questions	5
1.6 Significance of the study	5
1.7 scope of the study.....	6
1.8 Limitation of the study.....	6
1.9 organization of the study.....	7
CHAPTER TWO	8
2. Literature Review	8
2.1 Theoretical Literatures.....	8
2.2 Empirical literature	20
CHAPTER THREE	23
3. RETHODOLOGY OF THE STUDY	23
3.3 Description of study area	23
3.4 Research approach.....	23
3.5 Research design	24
3.6 Population and sampling	24
3.7 Sample design	24
3.8 Data collection	25
3.9 Data analysis methods	25

3.10 Pre-testing of tools.....	25
3.11 Validity and Reliability test	26
3.11.1 Validity test	26
3.11.2 Reliability test.....	26
3.12 Ethical consideration.....	26
RESULTS AND DISCUSSION.....	27
4.1. Introduction	27
4.2. Response Rate.....	27
4.3. Demographic characteristics of the respondents.....	27
4.4 quantitative Findings and Discussions	30
4.5 Qualitative data analysis finding.....	47
CHAPTER FIVE	52
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	52
5.1 Introduction	52
5.2: Summary of the finding	52
5.3 conclusion	55
Based on the finding of the result and discussion, the following conclusion is drawn about procurement practice and challenges of the agency.....	55
5.3 Recommendation.....	59
5.4 Suggestion for further study.....	60
Reference	61
Questionnaire	66
Interview Guideline.....	73

List of Tables

Table 1: Cronbach’s Alpha test result from SPSS	26
Table 2: Demographic characteristics of the respondents	27
Table 3: summary of good pharmaceuticals procurement practices.....	30
Table 4: Summary of pharmaceuticals procurement planning practices.....	34
Table 5: summary of supplier relationship management practices.....	39
Table 6: pharmaceuticals procurement challenges of EPSA	44

List of Figures

Figure 1: Procurement process.....	9
Figure 2: Most procurement challenges of EPSA.....	47

Abbreviation and Acronyms

ATA: Agricultural transformation Agency

CIPS: Chartered Institute of Procurement & Supply

EFDA: Ethiopian Food and Drug Authority

EML: Essential Medicine List

EPSA: Ethiopian Pharmaceuticals Supply Agency

ERCA: Ethiopian Revenue and Customs Authority

ESL: Ethiopian shipping line

EU: European Union

FDRE: Federal democratic republic of Ethiopia

FMHCA: Food, Medicine and Health care Administration Authority

FMOH: Federal Ministry of Health

FMOI: Federal Ministry of Industry

FPPA: Federal public procurement and property Administration Agency

FPPD: Federal public procurement Directive

GDP: Gross domestic product

GDPP: Good Dispensing Practice

GOB: Government of Belize

HSPT: Health Sector Transformation Plan

IAPWG: Interagency Procurement Working Group

KIWASCO: Kisumu Water and Sewerage Company

KPI: Key Performance Indicators

L/C: Letter of Credit

MDG: Millennium Development Goal

MOFD: Ministry of Finance and Economic Development

MSH: Management Science for Health.

OECD: Organization for European Co-operation and Development

PFSA: Pharmaceuticals Fund and Supply Agency

PPA: public procurement and property administration agency

PSCP: Pharmaceuticals supply core process

PSTP: Pharmaceuticals supply transformation plan

QMSD: Quantification and Market Shipping Directorate

RDF: Revolving Drug Fund

SIAPS: Systems for Improved Access to Pharmaceuticals and Services

SOP: Standard Operation procedure

SPP: standardized procurement procedures

UN CoLSC: United Nations Commission on Life-Saving Commodities

UNHCR: The United Nations High Commissioner for Refugees

UNIDO: United Nations Industrial Development Organization

UNOPS: The United Nations Office for Project Services

WHO: World health organization

Operational definition

Agency: It represents Ethiopian Pharmaceuticals supply Agency according to this study.

Essential medicines: are those that satisfy the needs of majority of population, should be available at all times, in adequate quantities and in proper doses, are rational and are of proven therapeutic value and safety (Government of Odisha, 2014, P.4).

Generic: means products which are the therapeutic equivalent of an originator product whose patent has expired. It contains the same active substance as the originator product and is essentially similar to, and is therefore, interchangeable with the originator product (Sri Lanka, 2006, P.6).

Investigator: a person who is responsible to conduct this particular research.

Medicines: In this particular study, it has similar meaning with drugs.

Pharmaceuticals procurement means the purchasing or obtaining of pharmaceuticals by any contractual means (FPPA, 2011, P. 8).

Pharmaceuticals: a substance or mixture of substance that used to prevent, diagnose, mitigate and treat a disease and malformation which include medical instruments and medical supplies (FDRE Proclamation No 553/2007).

Tender. The documentation and initiation of a process for soliciting bids; the specifications for the pharmaceuticals desired and opening the contract to the bidding process(USAID/Delivery, 2011, P. 101)

Chapter one

Introduction

This chapter deals with the background of the study which begins by describing general procurement and pharmaceuticals procurement, back ground of the study area, statement of the problems, research questions , general and specific objectives of the study, significance and scope of the study. Moreover, organization of the paper, scope and Limitation of the study are included.

1.1 Back ground of the study

Procurement means obtaining goods, works, consultancy or other services through purchasing, hiring or obtaining by any other contractual means (FDRE, 2009, P 2). Procurement is not simply the act of buying but encompasses a complex range of operational, business, information technology, safety and risk management, and legal systems (Ombaka, 2009, Cited in Muhia *et al.*, 2017, P. 2). Health commodity Procurement is a key activity in the supply chain which can significantly influence the overall success of health service and determine availability and total cost of pharmaceuticals. In most developing countries, pharmaceutical purchases represent the largest single health expenditure, after personnel costs (Islamic republic of Afghanistan, 2015, P.17). As per MSH (2012, Cited in Tame, 2014, p 323) description pharmaceutical procurement is a major determinant of pharmaceuticals availability and total health costs. It is indicated that pharmaceuticals expenditure represents the single largest expenditure after salaries and accounts for approximately 20 to 40% of the total healthcare budget.

Pharmaceuticals save lives and as such cannot be treated like other commercial products. The procurement and supply management of public health products is a responsibility of the public health system. It requires the development of an efficient procurement system within a comprehensive supply chain system which links processes of selection, procurement, storage, distribution, and rational use, built on the core principle of quality (Pan American Health Organization, 2006, P.7-10). Currently, billions of dollars are spent on health commodities necessary for the treatment of high burden diseases by low- and middle-income countries (LMICs). However many of these life-saving commodities often do not reach those most in need due to poor management of medicines, inadequate distribution systems, and a lack of information about demand at all levels of the health system.(UN CoLSC,2014,P.7).

Pharmaceutical procurement is structured process that involves many steps. Efficient procedures should be in place to select the most cost-effective essential medicines to treat commonly encountered diseases, quantify the needs, pre-select potential suppliers, manage procurement and delivery, ensure good product quality and monitor the performance of suppliers and the procurement system. Failure in any of these areas

leads to lack of access to appropriate pharmaceuticals and to waste (UNHCR, 2011, P.17). An effective pharmaceuticals procurement process ensures that the availability of the right pharmaceuticals in the right quantities with reasonable prices and at recognizable standards of quality. out of stock, overstocks, life saving pharmaceuticals supply interruption, wastage of resources, purchase of substandard quality products and lose of human life can often be encountered if pharmaceuticals procurement is carried out without a systematic and well mannered process (PFSA, 2016,p 1).

The pharmaceuticals importation in Ethiopia was one of the major country imported goods both through the government and donors funds. The share of the pharmaceuticals importation was 3 following petrol and food from 1979/80 to 2013/14. The pharmaceuticals importation proportion from 2007 to 2014 was about the 4th largest next to petrol, food and fertilizer. However, the aggregated importation of pharmaceuticals from 1979/80 to 2007/8 was 7,071,198,000 Ethiopian Birr while from 2007/8 to 2013/14, the total import were 37,339,535,000 Ethiopian Birr that is 5 times of the previous 16 years (Tesfaye, 2015, P.49)

1.2. Background of the Organization

Ethiopian Pharmaceuticals Supply Agency (its former name was Pharmaceuticals Fund and Supplies Agency (PFSA)) is the only governmental organization which procures pharmaceuticals from national and international suppliers and distribute to all government health facilities via its 19 branches which locate in different parts of the country.

It is legal entity established under the law of Federal Democratic Republic of Ethiopia (FDRE) government to assure uninterrupted supply of pharmaceuticals to the public at an affordable price. The Pharmaceuticals Fund and Supply Agency(PFSA) was established in September 2007 by Proclamation No. 553/2007 as part of Pharmaceutical Logistic Master Plan implementation with the objectives of enable public health institutions to supply quality assured essential pharmaceuticals at affordable prices in a sustainable manner to the public, play a complementary role in developmental efforts for health service expansion and strengthening by ensuring enhanced and sustainable supply of pharmaceuticals and create enabling conditions for enhancing the accumulation of funds in its revolving and cost recovery process and thereby ensure the realization of the objectives(taken from www.epsa.gov.et, accessed at 29 October,2019). It procures pharmaceuticals from all over the world centrally and distribute to all 19 branches and then to respective health facilities as per their demand. The head office of the agency is located in Addis Ababa at Arbegnoch Street, Addis Ketema Kifle Ketema in front of St. Paul Millennium Hospital, which is managing pharmaceuticals centrally.

The public sector, through Pharmaceuticals Fund and Supply Agency (PFSA) procures almost 70% of all the medicines consumed in Ethiopia, its procurement volume increased from US\$ 27 million in 2007 to US\$ 310 million in 2014. Most local manufacturers operate below their capacities and supply only about 20% of the local market. In the same year (2014), they supplied products to the value of US\$ 44.2 million (FMOH & FMOI, 2015, p 2). Ethiopia continues to experience growing demand for pharmaceuticals in the public sector. Since 2009/10, the annual value of product distributed by PFSA has grown from \$126 million to \$500 million in 2017/18. In 2018/19 the volume is projected to grow to \$750 million, and the 2016 – 2020 Health Sector Transformation Plan projects spending on pharmaceuticals and medical supplies in the public sector to reach almost \$1 billion by 2020, excluding the impact of introducing national health insurance (PFSA, 2018, P.6).

1.3 problem of the statement

According WHO's report (2011, cited in FMOH, 2019, P 58) noted that each year, an estimated 5.3 trillion dollars is spent worldwide on providing health services. It is estimated that 25% of total health expenditure is spent on pharmaceuticals. A significant proportion of these resources are resulting in significant losses, in terms of both health and economics due to poor selection of medicines, inefficient procurement practice and the likes. According to Organization for European Co-operation and Development (2009) report, public procurement represents an average 10-15% of GDP across the world. But, weak public procurement hinders market competition and raises the price paid by the administration for goods and services. It has direct impacting on public expenditures, health and life in the case of pharmaceuticals procurement.

The annual pharmaceutical market in Ethiopia is estimated to be worth US\$ 400 to US\$ 500 million and its growing rate 25% per annum. The local manufacturer supply only 90 of the more than 380 products on the national essential medicines list and it shares only the value of US\$ 44.2 million (FMOH & FMOI, 2015, pp 1-2). This implies that most products are obtained (sourced) from foreign manufacturers and suppliers by investing a huge foreign currency and collaborating with different role players in supply chain system. According to Tesfahun conclusion, from the total of 54 federal government ministries, agencies, universities and other institutions of Ethiopia, 36 organizations haven't prepared procurement plan(2011,P.58). Poor procurement planning leads to late delivery of items, price escalation, inadequate clarification of roles and responsibilities, poor estimation and poor specification (Joseph, 2016, P.5). The health supply chain ecosystem faces a range of challenges, from the policy level that may restrict product selection possibilities to the service delivery point that may face frequent stock outs due to poor forecasting, unavailability of transport, malfunctioning cold chains, or a variety of other issues. Poorly

functioning supply chains lead to redundancy of efforts, higher costs, stock outs, wastage and, as a result, poorer health (UN CoLSC, 2014, P.7).

As per pharmaceuticals supply core process(PSCP) report of the agency, non economical procurement order, inadequate procurement visibility, poor contract administration, lack of supplier contractual performance evaluations, lacks of comprehensive plan and suffers from non-need-based donations are some of procurement challenges which inhibit the effectiveness and effectiveness of the procurement. Moreover, the report emphasizes that inadequate integration and absence of joint-discussion forum with major stakeholders such as banks, insurance, Ethiopian Air line, ESL, suppliers, ERCA and FMHACA resulted in a long delay in availing pharmaceuticals on time (PFSA, 2016, pp 4 -5).

An assessment showed that the average procurement lead time of the agency is 372 days (PFSA, 2018, PP 1-12) even though health sector transformation plan (HSTP) of Federal Ministry of Health(FMOH) intended to reduce procurement lead-time to 120 days (FMOH, 2015, P.105). In contrast, the agency usually initiates pharmaceuticals procurement to complete the process within a maximum of one year (365 days). The same assessment confirmed that the time taken to obtain purchase order (PO) approval from medicine regulatory authority of the country(EFDA) is around 30 days, as well as the time for manufacturing and shipping the products cannot be shortened significantly, the internal processes prior to the issuing of POs are complex (PFSA, 2018, P.105)

The above stated problems may relate with the presence of weak stakeholders' cooperation in procurement process, incompatible rule and regulation of the country on procurement process, unnecessary procedure and bureaucracy or unreliable planning in the procurement process and the likes. The ultimate result of these problems can lead product supply interruption, wastage of scarce resource, customer dissatisfaction and loss of the precious human life.

Unfortunately, there is no scientific based evidence to conclude the exact source of the above stated problems. Pharmaceuticals supply system is cyclical in nature where each function is supported by the previous and leads logically to the next (Pan American Health Organization, 2006, P.13-16). Thus, improper procurement practice, weak supplier relationship and unreliable procurement planning practice can facilitate inefficient supply system. As therefore, this scientific study indentified the actual international procurement practices of the agency particularly pharmaceuticals procurement practice against good pharmaceuticals procurement practices, procurement planning practice (first and basic step of procurement), supplier relationship management practice and the most prevalent challenge of international procurement.

1.4 Research objective

1.4.1 General objective

To assess pharmaceuticals procurement practices and explores its challenges in the case of Ethiopian Pharmaceuticals Supply Agency.

1.4.2 Specific objectives

- 1) To assess pharmaceuticals procurement practices of Ethiopian pharmaceuticals supply agency against good pharmaceuticals procurement practices.
- 2) To assess pharmaceuticals procurement planning practices of the Ethiopian pharmaceuticals supply agency.
- 3) To assess supplier relationship management practices of Ethiopian pharmaceuticals supply agency.
- 4) To explore the main challenges of pharmaceuticals procurement of the agency pertinent to procurement planning, supplier relationship and good pharmaceuticals procurement practices.

1.5 Research questions

- 1) How does the agency practice its international procurement against good pharmaceutical procurement practice?
- 2) How does procurement planning practice in the agency?
- 3) How does the practice of supplier relationship management of Ethiopian Pharmaceuticals supply Agency?
- 4) What are the main challenges of pharmaceuticals procurement of Ethiopian Pharmaceutical supply Agency with related to planning, relationship and pharmaceuticals procurement practices?

1.6 Significance of the study

The study will contribute valuable information to improve good pharmaceuticals procurement practices, procurement planning practices and supplier relationship management practices in the pharmaceuticals procurement system.

In particular, this specific study mainly important for the agency to know the actual procurement practice and existed challenge, based on this it sustains its good achievement and correct improper (weak) practices. Based on the result, the agency will sustain its good achievement and correct improper (weak) practices. It also benefits all stakeholders of EPSA to work smoothly with it by alleviating existed challenges and improving way of their relation. The study is important for the public in general to avail the right products at the right time with affordable price. It also use for the government to design appropriate policy and

regulation on legal framework of pharmaceuticals procurement and to improve inter organization relationship. Moreover, the finding of the study will be used as base for other scientific researchers to investigate further on similar and related issues.

1.7 scope of the study

The core activities of Ethiopian Pharmaceuticals supply agency are pharmaceuticals selection, quantification, procurement, inventory management and distribution. All activities except procurement are done at both head office and branches of the agency. Thus, the study was conducted at head office of the agency, the only place where pharmaceuticals procurement is take placed.

The Agency is established with the objective of supplying life saving pharmaceuticals with sustainable manner to public; its main role is management of pharmaceuticals. Hence, the study was limited on assessment of pharmaceuticals procurement, not include other international goods and services procurement. Even though the agency procure pharmaceuticals from local and foreign sources ,this particular study was focused on foreign (international) procurement because of it is complex, lengthy and has main role players to obtain needed products.

Moreover, this study only focused on good pharmaceuticals procurement practices, procurement planning practice, supplier relationship management practices and common pharmaceuticals procurement challenges.

1.8 Limitation of the study

Among the factors affecting this particular study was shortages of reference materials which were done on similar titles especially pharmaceuticals procurement practices and challenges. Some results of the study are not compared with other similar study due to unavailability of similar study and materials.

The results of the study were expressed and conclude by only frequency and percentage without considering mean and standard deviation of the variables. Supplier relationship management practices were observed only on the agency side without involving suppliers in the study. Qualitative data was not collected from directors of the agency in three procurement directorates due their work overload and busy work conditions. Instead of them two senior procurement officers were included in qualitative study. Because of most staff members of procurement units were stayed in their home due to COVID-19 Pandemic disease, the expected number of sample size not achieved (obtained). Eight distributed but not returned questionnaires and six undistributed questionnaires were unfilled due to absence of employees from their work place.

1.9 organization of the study

This particular research was organized under five chapters. The first chapter deals about background of the study with special focus on procurement in general and pharmaceuticals procurement in particular, statement of the problem, general and specific objective of the study, significance of the study, scope of the study, limitation of the study. The second chapter covers theoretical, conceptual and empirical literatures review about procurement. Theoretical literature talks about the general concept and truth of procurement, good pharmaceuticals procurement practices, procurement planning, supplier relationship management and procurement challenges which were written by different scholars and organization. Empirical literature expressed about different finding and evidence done by different scholars on procurement area. The third chapter contains research methodology with subtopics like introduction, research design, research approach, population and sampling, data collection, data analysis, scale reliability and validity and ethical consideration topics are included and described. Chapter four described about assessment result and discussion, Chapter five consists of summary of find, conclusion, recommendation and suggestion for future study. Finally, reference and questionnaire were included as an annex.

CHAPTER TWO

2. Literature Review

Under this topic concept, truths, principles and scientific findings on procurement especially international procurement process, challenges, role players and the like are addressed to give clear understanding to readers.

2.1 Theoretical Literatures

A pharmaceuticals supply system is cyclical in nature where each function is supported by the previous and leads logically to the next. If each function is executed independently of each other rather than as part of an integral system, costs increase, stock shortages become more frequent and quality of service deteriorates (Pan American Health Organization, 2006, P.13-16). In general, pharmaceuticals supply management consists of four basic functions which are selection, procurement, inventory management and serving customers/use. Poor medicine management practice results shortages of essential medicines, high prices, poor quality, theft, expiration and incorrect use of medicines by patients (Gebremariam and Unade, 2019, P.1).

Procurement can be defined as the acquisition of property, equipment, goods, works or services through purchase, hire, lease, rental or exchange and is taken to include all actions from planning and forecasting, identification of needs, sourcing and solicitation of offers, evaluation of offers, review and award of contracts, contracting and all phases of contract administration until delivery of the goods (UNOPS, 2010, as Cited in WHO, 2011, P.8). Procurement is the process of obtaining what is required by the plans (WHO, 2011, P.17). It is a vital element of equitable access to health care system since procurement process is generally a critical part of organizations' expenditure. The linkage of procurement to organizational performance in particular, makes the embracing of best practices important to success of organizations (Pereruan, 2016, P.11). Procurement includes the functions of establishing specifications, selecting suppliers, working with suppliers to schedule delivery, follow-up, price determination, and negotiation (Arnold, Chapman & Clive, 2008, P 207). Procurement is the process of turning forecasts and supply plans into purchased products that are delivered to a point of entry. Procurement benefits most from well-defined and accountable processes, which work to ensure that commodities are obtained through fair, consistent, and reliable means. Without efficient mechanisms to manage procurement processes, the acquisition of commodities may easily become disorganized and costly, resulting in stock-outs of products or the placement of emergency orders to fill anticipated supply gaps (SIAPS, 2014, P 4). In general, procurement

process consists of ten steps that can be categorized in three groups; pre-purchasing, purchasing and post-purchasing as shown the figure 2.1 below



Figure 1: Procurement process

Source: Procurement process steps and distribution in the Procurement Manual (UNOPS, 2019, P 25)

Effective tendering can drive transparency in supplier selection; increase competition by expanding the pool of potential suppliers; increase supply security; and ensure that high-quality products are ultimately purchased. Procurement agencies require capacity to meet contractual obligations (timely payment) and monitor supplier performance (on-time shipment and compliance with quality standards) (Center for Global Development, 2019, P.34).

Public procurement is the overall process of acquiring goods, works and services, which includes all functions from the identification of needs, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration by using public fund (UNIDO, 2017, p. 9). It is the heart of public institutions, as its activities are the main determinants of final performance and can support or hinder policy-level decisions (Patrucco,Luzzini,and Ronchi,2017,PP 1-24). Public procurement is the function whereby public organizations acquire goods, services and development and construction projects from suppliers in the local and international market, subject to the general principles of fairness, equitability, transparency, competitiveness and cost-effectiveness (Naomi & Karanja, 2016, P 244).It is governed by basic rules and guidelines that spell out what can be done or not done on certain procurement processes. It must be transacted with considerations like economy, accountability, non-

discrimination among potential suppliers and respect for international obligations (Legesse, 2017, p 47). Governments regulate the way public procurement is executed by their laws and regulations (Nijboer, Senden, and Telgen, 2017, P 1). Public procurement is one of the most highly legislated and regulated fields of government. Each procurement process is governed by rule and regulations of the government as well as basic procurement principles irrespective of the value and complexity (Lloyd & Mccue, 2004, P 1).

An effective public procurement system allows suppliers to provide satisfactory quality, service and price within a timely delivery schedule (WHO, 2011, P.10). A well planned procurement process facilitates product storage and timely availability of supplies to users (Pan American Health Organization, 2006, P.13-16). Pharmaceuticals procurement effectiveness is mainly depend on the following core practices and existed challenges.

A. Good Pharmaceuticals practices

According to Management Science for Health (2012, PP 330-336) the following good pharmaceuticals procurement practice should be respected during pharmaceuticals procurement process.

Reliable payment and good financial management

Develop mechanisms for prompt, reliable payment and establish financial mechanisms with separate pharmaceuticals accounts. When late payments by procuring entities become the norm, suppliers may become discouraged and decide not to do business with procuring entities. Reducing the average time of payment can increase the number of firms participating in tenders, and thus increase competition among participants, which can translate into better value for money for the purchasing entity (MSH, 2012, PP 330). Prompt payments of suppliers which enhance trust on both partners and had enhancement of quality innovation and timely service delivery (Chepkesis and Keitany, 2018, P.7)

Procurement by generic name:

Use generic name (international nonproprietary names) for fair competition and specify quality standards, not specific brands. This promotes participation of all potential suppliers of pharmaceuticals, including those that supply pharmaceuticals with brand names (MSH, 2012, PP 331).

Procurement Limited to essential medicines list or formulary

Select and procure safe, effective, cost-effective, relevant, and priority pharmaceuticals and use formal approval procedures for procurement of non listed pharmaceuticals. This allows the health system to

focus limited resources on the most cost-effective and affordable products to treat prevailing health problems. A critical and foundational step in the procurement process is selecting the most clinically effective and cost-effective product (MSH, 2012, PP 332). When purchasers fail to consider value for money in deciding which products to list or make eligible for coverage, scarce budgetary resources for health are used inefficiently (Center for Global Development. 2019, P.33). Essential medicines play a crucial role in the prevention and control of diseases. Procurement entities have therefore developed Pharmaceuticals procurement list (PPL), based on countries essential pharmaceuticals list. The rationale for selecting a limited number of essential pharmaceuticals is that it will lead to: A reliable supply: Easier procurement, storage and distribution, adequate stocks and better quality assurance (UNHCR, 2011, P.7-8).

Procurement in large volume

Larger procurement volume makes favorable prices and contract terms more likely by increasing suppliers' interest in bidding and by providing them with an incentive to offer a competitive price. When necessary, specify divided deliveries to avoid overstocking of a pharmaceutical at a particular time (Islamic republic of Afghanistan, 2015, P.39).

Competitive procurement

Use competitive bidding on all but very small or emergency purchases to obtain the best prices. Allow only prequalified suppliers to compete in restricted tender. Procurement should be based on competitive procurement methods in order to achieve the lowest price, except in the case of small or emergency orders (The Global Fund, 2006, P.7)

Order quantities based on reliable estimate of actual need

Develop reliable consumption record and morbidity data. Adjust systematically for past surplus, shortages, stock outs and Adjust expected program growth and changing disease pattern. To avoid stock-outs, and at the same time to reduce wastage, the procurement requirements of essential pharmaceuticals should be established based on reliable data. A reliable system for quantification and the accuracy of procurement quantities increases the confidence of suppliers to participate and offer the lowest prices, on one hand, while increasing effective and efficient use of limited resources, on the other hand (Islamic republic of Afghanistan, 2015, P.39).

Separation of key functions

Key functions that required different expertise should be separated. Functions that involve different committees, units or individuals may include selection, quantification, approval suppliers and award of contract. All functions of the pharmaceutical procurement process should not be left entirely in the hands of one unit or official to avoid a conflict of interest and to increase accountability and transparency (MSH, 2012, PP 335).

Product quality assurance program

Establish and maintain a formal system for product quality assurance. Quality assurance product certification, inspection of shipments, targeted laboratory testing and reporting of suspected products. As an element of quality assurance, quality control refers to the testing of samples against specific standards of quality. The entity responsible for quality assurance under a grant must systematically draw samples of each pharmaceutical batch purchased. Samples should randomly be subjected to quality control testing in order to monitor compliance with quality standards (The Global Fund, 2006, P.8).

Annual financial audit with published results

Conduct an annual internal and external financial audit to assess compliance with procurement procedures, promptness of payment and related factors. Present results to the appropriate public supervising body. Take measures to improve practices based on results and recommendations of the audits (MSH, 2012, PP 335).

Regular reporting on procurement performance

Report key procurement performance indicators against targets and use key indicators such as ratio of price to world market price, supplier lead time, percentage of purchases made through competitive tendering, and planned versus actual purchase. To ensure that pharmaceuticals are available where and when they are needed, their procurement should be carefully planned and performance monitored against the plans (Islamic republic of Afghanistan, 2015, P.39).

B. procurement Planning

Procurement planning is the primary function that sets the stage for subsequent procurement activities. It ‘fuels and then ignites’ the engine of the procurement process. It is a process of determining the procurement needs of an entity and the timing of their acquisition and their funding such that the entities operations are met as required in an efficient way (*Basheka, 2009, P. 6*). The planning phase is the first stage of the public procurement cycle. In this stage procuring bodies should undertake a needs assessment

to define the goods or services being procured and prepare a bidding plan, including planning and preparation of budgets and the procurement method that will in the initial stages shape how the rest of the procurement will be used (Transparency International, 2015, P.1). One of the elements of procurement planning is market research which is the process of gathering, analyzing and interpreting information about a market, about a product or service to be offered for sale in that market, and about the past, present and potential customers for the product or service, recent price products to be procured, location and needs of business's target market. The market research phase is the most important phase of the procurement lifecycle in that vast majority of major decisions is made about the procurement (FPPA, 2017, P.52).

The implementing organization must have a formal written procurement plan produced at the beginning of each financial year. Annual procurement planning shall include list of the pharmaceuticals required with full specifications, an indication of the anticipated procurement method for each procurement requirement and the anticipated time for the complete procurement cycle taking into account the applicable approval requirements, schedule of procurement activities and delivery dates of the required pharmaceuticals, details of the budget available and sources of funding (Islamic republic of Afghanistan, 2015, P.56). Procurement plan should include shipment quantities, port of shipment, payment schedules, mode of shipment, desired delivery date, identification of the procurement method to be used, a list of the key steps in the procurement process and a timeline with estimated dates for completing each step of the process, names of the responsible parties and their role to facilitate procurement process. It should be started 24–36 months ahead and, and be updated regularly to ensure that the right products, in the right quantities; arrive at the right time, in the right condition, at the right price, and to the right place. It must be realistic based on past experience and current capacity and it should be shared to all concerned stakeholders (USAID, 2011, P 115).

Procurement and supply management plan contains information about what will be procured (commodities or services), when it needs to be procured by (delivery date), where it will be delivered to (location), who will be procuring (who does it and who else should be involved), and how the procurement will be processed (what method). The plan helps to establish the timelines required for procurement processes (WHO, 2013, P 7). In order to ensure that pharmaceuticals are available where and when they are needed, procurement must be carefully planned. Planners should consider factors such as access to suppliers; funding availability and timing; the number of levels in the logistics system; constraints of time and resources affecting procurement functions such as pharmaceuticals selection, quantification, tendering and

contracting; the lead times at various levels of the system; import procedures; customs clearance; and access to transport(FPPA,2011,P 180).

Procurement planning is a dynamic process that requires input from many different categories of professionals. It should be carried out by a multidisciplinary team established specifically for the purpose, with the participation of different technical and administrative professionals who have experience in procurement and supply management of strategic public health supplies, and knowledge and experience of national public health programs. Prior to purchasing, the procurement planning team conducts a rapid assessment of critical elements of the supply system that may impact on the future availability of strategic public health supplies (Pan American Health Organization, 2006, P.13-14). It is difficult to have an effective planning process for the purchasing function without vital input from stakeholders, especially suppliers. Their inclusion in the planning process opens up all types of communication avenues. Information discussed in the planning sessions should enable key suppliers to see the “big picture” of their clients’ operations, both in purchasing and in the corporation. Participating suppliers are in a better position to determine how they can contribute to firm’s competitive goals. Feedback receive from suppliers in the strategic planning process is a valuable tool in managing external inputs of goods and services. Having suppliers participate in planning process can significantly reduce chances of being blind-sided by production delays or price increases (Scheuing and Reilly, 2007, P.4).

Procurement planning needs to be improved to minimize low-value repetitive purchases increase the benefits of economies of scale and reduce the transaction and transport costs. The ability to plan procurement needs to be further developed to make the best use of the capacity of internal procurement staff and boost the suppliers’ capacity to deliver (WHO, 2015, P.8). Procurement planning enhances supplier’s performance in service delivery. Specifically, it enhances value for money and it also helps in enhancing quality (Chepkesis and Keitany, 2018, P.7). Good procurement planning is essential to optimize the contribution of the procurement function towards achieving the overall goals of the organization. It supports transparency, development of Key Performance Indicators (KPIs) according to milestones and accountabilities set in the procurement plan and use of the same to monitor performance. Proper pharmaceuticals planning can avoid unnecessary exigencies and urgencies. It enhances full compliance with standard rules and obtaining best prices for aggregate requirements(IAPWG,2012,P 32).The purpose of procurement planning is threefold: first, to clarify and quantify (to the extent possible) the technical, cost, and schedule objectives of the procurement; second, to define the plan for accomplishing the

objectives; and third, to determine a methodology for evaluating performance against defined objectives during the time that the contract is being carried out (North West territories,2009, P.1)

Price variations, late delivery of items and poor quality goods and services were seen as the major implications of poor procurement planning. Poor planning is a hindrance to achieving procurement objectives (Joseph, 2016, P.63).

C. Supplier Relationship Management practices

Supplier management is the process of selection, administration and monitoring of supplier services and products. Supplier management requires the establishment of relations with suppliers based on mutual trust and respect. It requires suppliers to provide legal, technical, and financial information to the procurement agency to permit continuous evaluation of supplier performance (Pan American Health Organization, 2006, P.64). Supplier Relationship Management (SRM) is a comprehensive approach to managing an organization's interactions with the firms that supply the products and services it uses. The immediate objective of SRM is to streamline and make more effective the sourcing processes between an enterprise and its suppliers. Indirectly, SRM is also aiming at quality-related improvements of information, products, services, and work force capabilities (Mettler and Rohner, 2009, P.2).

Supplier relationships have become one of the key interest areas of strategic supply management. The focus has changed from transactional and short-term relationships to collaborative and long-term relations, where the mutual intention is to increase flexibility and create value through cooperation (Lintukangas, 2010, P.1-2). Supplier relationship activities play important role where players willingly share risks and rewards and maintain relationship on long term basis (Nyamasege and Biraor , 2015,P.30). The focus of procurement will move from buying and contracting for products and services to sourcing value, efficiency and outcomes harnessing the full capability & contribution suppliers can make and capturing additional value from the supply chain through benefits such as improved clinical outcomes, shorter procedure times, reduced length of stay, reduced infection rates, and increased operational efficiency (Oxford university hospitals, 2018, P.3). New approaches to working with suppliers across the supply chain will become increasingly important - developing positive relationships and partnerships with key suppliers improve efficiency for the trust, and most importantly, improve outcomes for patients (Oxford university hospitals, 2018, P.3).

The objectives of SRM are defined to be: i) minimization of transaction costs, ii) value creation through internal capabilities and resources, iii) gaining competitive advantage from cooperative relationships, iv) reducing the risks of supply dependence and availability, and v) diffusion of supplier information between

business units. The firms with organizational capability to manage supplier relationships are committed to develop their supplier relationships in a collaborative way, have ability to coordinate their supply chains effectively, aim to trustful relations, communicate actively with their suppliers, and follow valid supply processes (Lintukangas, 2010, P.1-2).

In the relationship with the supplier; the higher the serviceability of the supplier is, the higher the degree of trust created with its buyers (Moeller, Fassnacht & Klose, 2014, P.17). Financial reliability of the buyers affects greatly the degree of trust the company has in them. The more the buyer is capable of paying for its purchases fully and on time, the higher the degree of trust built with its suppliers. The sustainability and credibility are considered a common factor between buyers and suppliers that affects the trust built within a relationship. Both buyers and suppliers have to be highly credible and honest with one another to enable high degrees of trust to be built and consequently strengthening the relationship among them. If supplier is capable of producing their buyers' demand, flexible enough in responding to changes in volumes and varieties required, assuring high quality products, and is more dependable in delivery date and time; the company will be encouraged to trust and deal with it (Moeller, Fassnacht & Klose 2014, and P.17). Serviceability, sustainability, quality assurance, production capabilities, dependability, reliability, and credibility are found to be the main determinants of the degree of trust between buyers and suppliers (Morsy , 2017,P.14)

Commitment is a service level offered by the suppliers during and after the transaction performed. The willingness to develop capabilities and enhance performance reflects greatly the degree of commitment to the current relationship. In addition, the degree of dependability and readiness to provide the company with high quality products ensures the commitment of the supplier as well (Moeller, Fassnacht & Klose, 2014, P.17).

High frequency of communication between buyers and suppliers, business would help them a lot in having stronger and more durable relationship, and enable them to build higher degrees of trust and commitment in the relationship. There are three types of communication that would help both buyers and suppliers to sustain and have more successful relationships which are the business, social, and strategic communications. The business communication is done to help buyers to keep track of their orders and agree on the prices with suppliers. On the other hand the social communication between buyers and suppliers will result in a friendly environment that helps in better problem solving, and consequently closer relationships. Finally the strategic communication will help buyers and suppliers to work for mutual benefit and encourage knowledge exchange among them. Both social and strategic communication occurs in

collaboration, rather than arm's length relationship. They help in strengthening the relationship and creating relational norms among them (Moeller, Fassnacht & Klose, 2014, P.17).

Successful companies have learnt the importance of having a supplier base that they can rely on to provide services and materials consistently and on time, and can consistently meet specification requirements. These can only be achieved through partnerships where both of the partners share common interests and are willing to go the extra mile for one another, creating loyalty and financial success (Amad *et al.*, 2008, P.13). Supplier segmentation is one of supplier relationship management strategy which involves differentiating suppliers into groups, preparing supplier segmentation groups, appraising the groups, detecting prospects with suppliers as well as developing service level agreements based on a well-defined set of criteria (Muema, 2016, P.37).

Prequalification is a process whereby prospective suppliers are assessed against predetermined criteria. Only those that satisfy the set criteria are selected and invited to bid. It is a strategy best used when the procurement entities procure pharmaceuticals on a regular basis. It is a useful method for gaining knowledge of prospective eligible suppliers, with the primary aim of minimizing cost and risk for both procurement entities and suppliers (Islamic republic of Afghanistan, 2015, P.22-27).

Performance measurement: performance on timely shipment and compliance with quality standards (Center for Global Development. 2019, P.34). A formal supplier evaluation system must be established to monitor the suppliers' performance on a periodic basis so that appropriate feedback and corrective actions can bring the poor performing suppliers back on track (Amad *et al.*, 2008, P.13). To be effective, awards can be presented to the best suppliers as a means to recognize their achievements and to motivate them to maintain and/or improve their performance level. It is vital for the buying firms to develop and foster a close relationship with their suppliers, in order to ensure continuous and sustainable improvements (Amad *et al.*, 2008, P.12).

D. Challenge of procurement

Public procurement accounts for 13-15% of GDP in the developing and emerging market economies so that the economic and welfare gains that can be achieved from more transparent, competitive and efficient procurement can be considerable, especially at a time of uncertain or slow economic growth. But public procurement markets represent one of the most challenging areas (Woolcock, 2012, P 9). Efficient procurement practices, both private and public, play a key role in modern economies as they ensure reduction of wasteful activities. Achieving such efficiency is an ambitious task, as procurement faces

numerous challenges, especially due to the market structure, the legal framework, and the political environment that procurers face (Thai, 2004, cited in *Carpinetti, Piga and Zanza*, 2014, P.3)

The health supply chain ecosystem faces a range of challenges, from the policy level that may restrict product selection possibilities to the service delivery point that may face frequent stock outs due to poor forecasting, unavailability of transport, malfunctioning cold chains or a variety of other issues. Poorly functioning supply chains lead to redundancy of efforts, higher costs, stock outs, wastage and, as a result, poorer health (UN CoLSC, 2014, P.7).

According to UN CoLSC report showed that there are different procurement barriers that prevent increase access to life-saving commodities for public. Poor, inadequate or inaccessible data that makes it difficult to forecast and plan commodity needs accurately. Moreover, lack of coordination, lack of capacity for quantification, limited number of staff trained in proper quantification, unpredictable and long lead times for delivery of procurements, bureaucratic procurement processes, inconsistent flow of fund are some of the procurement barriers(2014,P.46).

Gabra indicated that inadequate rules, regulations, and structures for pharmaceuticals, public sector staff with little experience and training to respond to market situations, insufficiency of government funding and lack of unbiased market information are the most common procurement challenges(2006, P 29). Public procurement of pharmaceuticals is a complex process that engages several stakeholders over an extended period of time. It is common to have challenges during the procurement process due to number of stakeholders involved in the process, the strict nature of procurement procedures and high value of funds allocated for procurement (USAID Delivery, 2011, PP 109-111). As per its conclusion, the most common and critical procurement challenges revolve around the following:

Accurate quantification/forecast data

This data is essential for ensuring the procurement process results in the correct quantity of commodities that will be procured. A forecast that is too low could result in stock outs which often trigger expensive emergency procurements, creating a financial strain on limited budgets. A forecast that is too high can cause excess holding costs, storage-capacity strain, and an increased chance of products expiring on the shelf.

Lengthy procurement process

Each of the process steps from quantification of requirements to delivery of goods requires a specific amount of time to complete. While some steps can be done in parallel and will vary in the time required, some are often fixed for a set period, and may require validation or concurrence of one or several

stakeholder(s). For example, most national procurement regulations will stipulate the amount of time a bidder has to respond to an international bid which can range from 30–45 days in the case of Ethiopia. It must be considered the manufacturer's production time, as well as shipping transit time and customs clearance time. Together, it is not uncommon for the public sector procurement process for health care commodities to take from 10–16 months, and sometimes longer, to complete. It is important for supply and program managers to understand procurement lead time requirements to ensure that quantification and procurement planning can be initiated early enough to support the procurement and supply cycle.

Delays in funding allocation and release

Delays in government funding approval and allocation of program procurement budgets delay the release of bidding documents; which, in turn, can delay the eventual delivery of the commodity. Donor funding cycles may also create delays in the procurement process if their funding cycles are not aligned with the government procurement cycle. Delays in supplier payments, because of national cash flow, shortage of foreign currency, and treasury management constraints, can cause suppliers to hold shipments; this can lead to supply problems.

Product quality assurance

Counterfeit and substandard products are in the marketplace, creating a significant product quality risks for the supply system. To address this risk, public sector procurement processes and national regulatory agencies must implement appropriate quality assurance measures to ensure that only quality products enter the supply system. Procurement addresses this responsibility through the technical specifications, issued with the bidding document, that identify key product quality requirements, such as product certification requirements, pharmacopeia standards (when applicable), labeling and packaging requirements, shelf life requirements, etc. These requirements become the contractual obligations the supplier must comply with when a contract is awarded. The bidding and contract documents should also include the right to conduct pre-shipment or post shipment inspection and testing to confirm that the product complies with the stated quality assurance requirements.

Transparency throughout the procurement process

Because of the large sums of money involved in health care commodity procurement, it is common for fraud and corruption to occur. Special interests, suppliers, procurement personnel, and others may seek to influence product selection, manipulate order sizes and manipulate supplier selection and contract award decisions to increase sales and profit margins for their personal benefit. Procurement officials must support an open procurement process by consistently applying national procurement regulations and procedures,

and international best procurement practices that promote transparency (USAID Delivery, 2011, PP 109-111).

2.2 Empirical literature

A study was done at the University of Nairobi showed that existence of inadequate planning, complex regulations by the public procurement act, procurement costs being high and interference by higher management in the procurement Processes were some of the key challenges experienced in the procurement (Pereruan, 2016, P.57). The main challenges of pharmaceuticals supply of African countries were unknown demand, lack of transparent procurement procedures, lack of appropriate planning and inadequate budget allocation (WHO, 2006, Cited in Schöpferle, 2013, P.16). Another study on public procurement in Africa revealed that lack of proper knowledge, skills and capacity, non-compliance with supply chain management (SCM) policy and regulations, inadequate planning and the linking of demand to the budget, accountability, fraud and corruption, inadequate monitoring and evaluation of supply chain and unethical behavior were the most common problems of procurement (Harvard medical school, 2012, P 3).

According to Tsega (2017, P 54) the major factor that make procurement delay at Addis Ababa university are foreign currency or processing of L/C and different amendments from bank, and release of documents by Ethiopian Shipping and Logistics Service Enterprise to release the goods as well as lack of motivation by procurement staff. The survey that was done on entitled public procurement practices and challenges in Ethiopia showed that inadequate planning and lack of linkage of demand to the budget were challenges of procurement in the selected public organizations (Leggesse, 2017, P 46). According to the study finding of Mulualem(2014,P 42),Commercial bank of Ethiopia encounters procurement challenges like lengthy budget approval process, late delivery of purchased goods/ service, limited number of suppliers for some items, reliability of suppliers both in terms of availability & quantity for specific items or services and the continuous market inflation.

In Ethiopia, a country wide assessment of the pharmaceuticals supply management system was undertaken to document the challenges faced in the procurement, storage and distribution of pharmaceuticals and health commodities. The assessment revealed that long procurement lead times, inadequate storage infrastructure, and unsystematic distribution practices were major constraints to pharmaceuticals supply management system in the country (FMOH, 2005, cited in Tesfaye, 2015, P.11).

As study was done by Damte at Agricultural transformation Agency of Ethiopia(ATA) found that the most significant problems that delays the procurement processes of agricultural transformation Agency of Ethiopia are regulatory caused by long and strict government rules and process that hinder the efficient service delivery. It also showed that public procurement legal framework gives excess control and authority to the FPPA (2018, P.62).

The study was done on Bosnia and Herzegovina (BiH) institutions showed that there was no proper market analysis to conduct procurement which caused delays in 22 % of procurements in the implementation phase. Moreover, it was found that 89 % of procurement was not completed in accordance with the planned completion deadline, which points to planning weaknesses and raises questions on the purpose of planning. This particular study indicated that the institutions do not take into account all the possible risks that may arise in the procurement process and the time necessary for public procurement is not properly assessed and is not based on realistic indicators. The study clearly revealed that almost 90% of procurement procedures were not completed within the deadlines set in the procurement plans (EU, 2018, P.33-35).

The study was done at Western Balkans showed that overall problems in public procurement can be traced back to poor planning and poor preparation of the procurement process. It has shown that a failure to estimate future needs properly and in good time, accompanied by a failure to conduct proper market research and prepare clear tender specifications, is at the root of many problems that occur at a later stage. These often cause delays, incorrect deliveries, inappropriate supplies of goods, works and services, tender annulments, and an inability to effectively implement contracts with suppliers (EU, 2018, P.24)

A total of 54 federal government ministries, agencies, universities and other institutions were assessed by the FPPA. From these institutions 36 organizations (or 63.16%) haven't prepared proper procurement plan (Tesfahun, 2011, P 58)

In Ethiopia, a country wide assessment of the pharmaceuticals supply management system assessment revealed that long procurement lead times, inadequate storage infrastructure, and unsystematic distribution practices were major constraints to pharmaceuticals supply management system in the country. It showed that one of the main causes of these problems is poor procurement planning in the Federal Ministry of Health (FMOH, 2005 cited in Tesfaye, 2015, P.11).A study was conducted on Agricultural Transformation Agency (ATA) of Ethiopia showed that procurement plan is not fully prepared and the plan is failed short to be presented based on the standard and on appropriate time (Damte, 2018, P.48).

Public Procurement Oversight Authority of Kenya (2007, P 14) study finding showed that lack of feedback mechanism, low stakeholder awareness of web-based procurement information system: lack of feedback mechanism are some the challenges of procurement. One study at KIWASCO ensured that procurement information was shared amongst all interested stakeholders and that the firm ensured that the tendering process was open to all interested bidders (Ogwang and Waweru, 2017, P.20). Another study was done on manufacturing firms in Malaysia showed that there is very little formal assessment of the supplier's performance. Even if there is assessment, evaluation is carried out on rare occasions and on an ad-hoc basis and with no clear procedures (Amad *et al*, 2008, P.13).

A study was done in Kenya at manufacturing firms showed that trust, commitment and long-term interaction were exhibited between Study Company and its supplier with mean of 4.17, 4.03 and 4.08 respectively (agree). The study concluded that most firms have embraced collaborative relationships with their existing suppliers (Musanga, Ondari, Kiswili, 2015, P.15). Another study was done at Sports Kenya by Muema in 2016 revealed that the organization has classified suppliers based on a well-defined set of criteria with rate of great extent (Muema, 2016, P.37).

A study found that drugs were ordered with generic names and the selection of drugs for procurement was based on the national essential drugs list (Muhia, Waithera and Songole, 2017, P. 4). Another study at KIWASCO noted that monitoring of the procurement procedure was effected by external independent entities. KIWASCO was further found to ensure that forensic audits were conducted on the entire procurement procedure (Ogwang and Waweru, 2017, P.20). Late payments were identified as a main barrier to companies in public procurement, with 38 percent of companies classifying late payments as a main obstacle (The World Bank, 2016, P. 38)

CHAPTER THREE

3. METHODOLOGY OF THE STUDY

3.1 Introduction

This chapter includes description of study area, research design, research approach, sources of data and data collection techniques, sample and sampling techniques and methods of data analysis.

3.2 Study period and area

This study was conducted from October 2019 to May 2020 in Addis Ababa, Ethiopia. Details of the study area profiles are described as follow;

3.3 Description of study area

Ethiopian pharmaceuticals supply Agency was the study area of this particular research. The agency had been established in 2007 by proclamation number 553/2007 with mandated to avail affordable and quality pharmaceuticals sustainably to all public health facilities in the country. It has 19 branches in different regions which supply pharmaceuticals for more than 4,000 public health facilities of the country. The head office is located in Addis Ababa, Addis Ketema Sub-City approximately 2.8 km west of Pizza (Center of Addis). The Agency is organized into three main sub process namely quality management unit, Inbound and Outbound logistics units. Under quality management unit capacity building and operation research directorate and Management information system directorate are supervised. There are three directorates under inbound logistics units namely Quantification & Market Shaping Directorate, Tender Management Directorate and Contract Management Directorate. On the other hand, outbound unit includes Storage & Inventory Management Directorate and Distribution & Fleet Management Directorate. Other functional units like Fund management (RDF & Program), Human Resource Development Directorate & General Service Directorate and others are supportive functional units at head office. The study was done at inbound logistic unit which supervises and manages the whole pharmaceuticals procurement process (from need collection up to warehouse delivery).

3.4 Research approach

The research used both qualitative and quantitative research approaches. Quantitative Primary data was collected through self administered questionnaire and qualitative primary data was collected by using semi structured interview guideline. The qualitative and quantitative data were mixed and analyzed to meet the objectives of the study.

3.5 Research design

The research used descriptive research design to describe the pharmaceuticals procurement practices and challenges of Ethiopian Pharmaceuticals Supply Agency. This method focuses more on the “what” of the research subject rather than the “why” of the research subject. Descriptive research allows the researcher to assess and describe the present situation of good pharmaceuticals procurement practices, procurement planning and supplier relationship management practice and exist procurement challenges of EPSA.

3.6 Population and sampling

The target population of this particular study was all individuals at EPSA who are involving in procurement process directly or indirectly. As therefore, all employees of EPSA who are working at three directorates under inbound logistics (Quantification & Market Shaping Directorate, Tender Management Directorate and Contract Management Directorate) were the source of population. Quantification & Market Shaping Directorate (QMSD) staff members manage the procurement process starting from forecasting and quantification till procurement request (pre-purchasing steps). Tender management directorate staffs precede the process from procurement request steps to contract signing (Purchasing steps). Finally, contract management directorate manage and follow up the remaining process till the products deliver to warehouse of the agency (post purchasing steps). These three directorates are interrelated each other and work closely to facilitate the process of international procurement. EPSA staffs members who are working at these directorates are the right candidate to express and narrate international procurement practices and existing challenges in the process. There are 89(Eighty two) staff members under these three directorates so that this number was the target population of the study.

3.7 Sample design

Respondents were purposely selected based on their work experience and technical skill. It was assumed that employees with more than one years experience on procurement process had better understanding and exposure on actual procurement practice of the agency and existed challenges. In addition to this, the study needs technically skilled persons who are knowledgeable on the area of procurement. Thus, this particular study used purposive sampling method to select the right number of sample. 71 employees were selected to collect quantitative data, but six of them were not present during data collection period due COVID-19 pandemic. On the other hand, a total of nine team leader (coordinators) and two senior procurement professionals were selected to collect qualitative data. Three team leaders from each directorate and two senior procurement professionals from tender management and contract management were purposely selected to get better and detail information about procurement practice and challenges.

3.8 Data collection

Self administered questionnaire was prepared by investigator based on the objectives of the study, related literature and related previous study. The prepared questionnaire was evaluated by procurement experts against research objectives to incorporate their comment and improve it more. After incorporating their comment and correction, pilot testing was made on two staff members from each directorate. Based on this, some amendment and improvement was made to develop clear tool. Semi structured interview guideline was also prepared on the same process and procedure. A self administered questionnaire contained Likert five point ratings and close ended questions.

The respondents have been requested their consent before delivering self administered questionnaires to collected quantitative data. The purpose of the assessment was clearly explained for them. After getting their consent and explaining the purpose, a total of 65(sixty five) questionnaires were distributed to each participant by hand. Out of these, 57(fifty seven) of them were correctly filled and returned. Eight of them unreturned due to absence of employees from their working place. The required qualitative data was collected from eleven participants (nine team leaders and two experts) by using semi structured interview guideline.

3.9 Data analysis methods

The collected data was checked initially to detect for any errors to ensure consistency and completeness. After the data is checked it was coded, entered and analyzed by using Statistical Package for the Social Sciences (SPSS) version 20. Study results were analyzed by using statistical analysis technique; especially descriptive statistics techniques (mean standard deviation, frequency and percentage). The result was presented in the forms of tables and graph. Finally, based on findings of the study conclusions and recommendation were forwarded.

3.10 Pre-testing of tools

The data collection tools were pilot tested on six procurement professionals, two from each directorate to check the clarity, validity, ambiguity and readability of the statements and questions. This helped the researcher to get a feedback on leading and ambiguous questions. Based on the pilot study, the investigator corrected unclear statements and refined the tool as good as possible.

3.11 Validity and Reliability test

3.11.1 Validity test

Validity implies the degree to which a question measures what it was intended to measure. To make data collection tools responsive and address the objectives of the study, the investigator provided draft questionnaires with research objectives for six procurement experts (two from each directorates) for their comments, corrections, suggestions to improve it more. Based on their comment and correction, data collection tool was revised. After revising it, a pilot testing was also carried out on two staff members from each directorate to check how the tool was correctly prepared and responsive.

3.11.2 Reliability test

Reliability is the extents to which a variable or set of variables is consistent in what it is intended to measure and the rationale for this internal consistency. If cronbach alpha coefficient is less than 0.6, it is poor, 0.6-0.7 is moderate, 0.7-0.8 is good, 0.8-0.9 is very good and greater than 0.9 is excellent (Robert & Richard, 2008, P.419).

Table 1: Cronbach's Alpha test result from SPSS

Group of variables	Reliability Statistics		
	Cronbach's Alpha	No of Items	Level
Good pharmaceuticals procurement practices	0.933	10	excellent
Procurement planning practices	0.907	10	excellent
Supplier relationship management practices	0.894	10	Very good
Total N		30	

As shown in the above table 1, the reliability of the scale was determined by Cronbach's alpha method. The result indicated that all questionnaires were within acceptable range.

3.12 Ethical consideration

Before the start of data collection, formal letter was written to EPSA by Addis Ababa University, school of commerce to get official permission to conduct the assessment. All information was secured until it officially presented and disclosed. All the information and documents including the questionnaire was used ethically without falsifying the original intention of the respondents. Objectives and expected advantages of the study were briefed to respondents prior to the collection of data. A high degree of confidentiality during data collection was taken and no names of respondents were indicated in the result.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Introduction

The objective of this chapter is to presents, analyzes and interprets the obtained data from self administered questionnaires and interview. Primary data on good pharmaceuticals procurement practices, procurement planning practice, supplier management practices and procurement challenges of the agency were collected by self administered questionnaires from employees who involve on international procurement process. Eleven employees (nine coordinators and two senior procurement officers) were interviewed by using semi structured interview guideline to gather the required data about procurement challenges, procurement planning and supplier relationship practice. The questionnaires were delivered by hand to each of the respondents to collect quantitative data and face to face interview was conducted to collect qualitative data. Based on this, data were presented, analyzed and interpreted accordingly as per below subtopic expression.

4.2. Response Rate

A total of 65 questionnaires were distributed, of which 57 were correctly filled and returned with response rate of 87.69%. On the other hand, eleven respondents were participated on interview questions to collect qualitative data on procurement challenges in general and pharmaceuticals procurement challenges in particular. These were used for the subsequent analysis. The data were summarized and presented as follows by using descriptive statistics; frequency, percentage, mean and standard deviation.

4.3. Demographic characteristics of the respondents

Under this section, demographic information of the respondents who participated on quantitative data was presented in different form based on their characteristics and suitability. The questionnaire requested limited information related to personnel and professional characteristics of respondents like gender, profession, age, current educational level, current position, years of experience, position and directorate where respondents currently working.

Table 2: **Demographic characteristics of the respondents**

S.N	Characteristic of respondents		frequency	Percentage
1	Gender	Male	46	80.7
		Female	11	19.3
2	Profession	Pharmacy	32	56.1
		Laboratory technology	8	14.0
		Biomedical Engineer	9	15.8
		Accounting and finance	2	3.5
		Management	3	5.3
		Other (specify)	3	5.3
3	Age	18-24	2	3.5
		25-31	30	52.6
		32-38	20	35.1
		39-45	1	1.8
		Above 45	4	7.0
4	Educational status	Diploma	1	1.8
		Degree	35	61.4
		Master	21	36.8
5	Position	Officer	36	63.2
		Coordinator	15	26.3
		Director	3	5.3
		Technical advisor	3	5.3
6	Experience	1-3 years	23	40.4
		4-6 years	19	33.3
		More than six years	15	26.3
7	Directorate	Tender management	20	35.1
		Contract management	21	36.8
		Quantification and market shaping Directorate	16	28.1

Source: Survey questionnaire (2020)

4.4.2 Gender information of the Respondents

As indicated in the above table, the gender proportion of male respondents was 80.7%, while the female respondents were 19.7%. This implied that more male than female respondents involved in the study and both category of gender participated in the survey.

4.4.2 Profession of the Respondents

As per the above illustrated table, it is indicated that majority of the respondents was pharmacy professionals which accounts 56.14%, the next highest profession was biomedical engineers which contained 15.79% of the respondents and the third highest profession in this study was laboratory technology which cover 14.04% of the total quantity.

4.3.3 Age information of the Respondents

As per the above table, it was showed that most of the respondents (52.63%) were between the age of 25-31 and the next highest number of respondents was between 32-38 years old which covers 35.09% of the total respondents. Least number of respondents was participated in study between the ages of 18-24. This indicates that EPSA has young productive human powers who worked at procurement process.

4.3.4 Current educational status of the Respondents

The above table clearly showed that almost all employees of the agency who worked at procurement process were degree and master holders which account 61.40% and 36.84% respectively. This implies that most of the professionals who participated on procurement processes were well educated.

4.3.5 Current position of the Respondents

As indicated in table, most of the target respondents (63.16%) worked at the position of officer and the next highest number of respondents (26.32%) worked at the position of coordinator (team leaders) in different functional unit of procurement. The remaining respondents worked as being directors and technical advisors which share 5.26% each. This shows that respondents from different level of positions participated in this particular study. Furthermore, it enables to get relevant and reliable information from different level of position.

4.3.6 Total years of experience of the Respondents

From the findings in table, most of the respondents (40.35%) had 1-3 year work experience at procurement unit and 33.33% of respondents' had 4-6 years of experience as being procurement staff members. The remaining 26.32% of the respondents had more than six years work experience. As clearly indicated on

chapter three of this particular study, candidates of this assessment was employees who had more than one year work experience and technical persons involving on procurement process. Although most respondents are seems less experienced, they are capable enough to provide the required information of the actual procurement practice and existed challenges.

4.3.6 Directorate of the Respondents

The respondents were asked to indicate their current working area (directorate at the agency).

Based on their response, majority of the respondents (36.84%) worked at contract management directorate and 35.09% of them were at tender management directorate. The remaining 28.07% respondents worked at quantification and market shaping directorate. It showed that participants were represented from three directorates.

4.4 quantitative Findings and Discussions

Respondents were asked to rate their opinion about good pharmaceuticals procurement practices, procurement planning practices and supplier relationship management practices of the agency. Under each section, respondents were asked ten questions to indicate their level of agreement by using likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Moreover, closed ended questions were delivered to the respondents to select the most prevalent pharmaceuticals procurement challenges of the agency.

As therefore, respondents indicated their level of agreement for each corresponding statement by using a 5-point Likert scale where 1, 2, 3, 4, and 5 represented strongly disagree(**SD**), disagree(**D**), neutral(**N**), agree(**A**), and strongly agree(**SA**) respectively. The response was presented in form of frequencies, percentage, mean and standard deviation.

4.4.1 Good pharmaceuticals procurement practices

This subsection showed that the actual procurement practices of the agency against good pharmaceuticals procurement principles (practices). In relation to this, the results are shown in table below.

Table 3: summary of good pharmaceuticals procurement practices

S.N	Good pharmaceuticals practices	SD (F/ %)	D (F/ %)	N (F/ %)	A (F/ %)	SA (F/ %)	mean	SD
1	All products are procured with their generic names (international non-proprietary names)	1(1.8)	3(5.3)	7(12.3)	21(36.8)	25(43.9)	4.16	0.960

2	Products to be procured are limited to pharmaceuticals procurement list of the agency.	2(3.5)	10(17.5)	5(8.8)	23(40.4)	17(29.8)	3.75	1.169
3	Procurement is always made in bulk volume	3(5.3)	17(29.8)	6(10.5)	24(42.1)	7(12.3)	3.26	1.173
4	All products except very small or emergency one are procured via competitive bidding (open tendering).	2(3.5)	7(12.3)	6(10.5)	22(38.6)	20(35.1)	3.89	1.129
5	Requested quantities for procurement are based on reliable estimate of actual need	4(7.0)	30(52.6)	7(12.3)	10(17.5)	6(10.5)	2.72	1.161
6	Key procurement functions that require different expertise are separated in unit	1(1.8)	3(5.3)	10(17.5)	30(52.6)	13(22.8)	3.89	.880
7	There is a formal system for product quality assurance program	8(14.0)	14(24.6)	10(17.5)	20(35.1)	5(8.8)	3.00	1.239
8	Annual financial audit with published results is done regularly to assess compliance with procurement procedures and promptness of payment	9(15.8)	14(24.6)	8(14.0)	21(36.8)	5(8.8)	2.98	1.275
9	Key procurement performance indicators like ratio of unit price to world market price, supplier lead time, percentage of purchases made through competitive tendering, planned versus actual purchase against targets are done and reported to concerned bodies	4(7.0)	11(19.3)	10(17.5)	26(45.6)	6(10.5)	3.33	1.123
10	The agency develops prompt and reliable payment mechanism for suppliers	9(15.8)	24(42.1)	8(14.0)	9(15.8)	7(12.3)	2.67	1.272
Grand Mean =							3.37	

Source: Survey questionnaire (2020), *F=frequency*

From the above table, majority of the respondents were strongly agree (43.9%) on the point that all products are procured with their generic names (international non-proprietary names) and 36.8% of the respondents agreed on the same point. Low number of respondents (1.8% and 5.3%) disagreed on the stated point. This indicated that the agency procures their products with their generic name. According to Management Science for Health, procuring pharmaceuticals with their generic name enhance fair competition, avoid confusion, improve quality standards and realize value of money(2012, PP 330-336). Another study which was done in Kenya at Narok County Referral Hospital showed that pharmaceuticals procurement were ordered with their generic name ,which was similar with this particular study finding(Muhia, Waithera and Songole, 2017, P.4).

70.2% of the respondents (sum of 40.4% agreed and 29.8% strongly agree) confirmed that procurement is made from pharmaceuticals procurement list of the agency. This allows the agency to focus on the most cost-effective and affordable products to treat prevailing health problems (MSH, 2012, PP 330-336). Another study which was done in Kenya in 2017 arrived on similar conclusion; it said that selection of drugs for procurement was based on the national essential pharmaceuticals list (Muhia, Waithera and Songole, 2017, P.4)

For question number three, 42.1% of the respondents agreed on the point that procurement is always made in bulk volume but 29.8% of the respondents opposed the same idea. However, the sum of respondents which selected agrees (42.1%) and strongly agrees (12.3%) covered more than half of the total target population (respondents). This implies that most of the respondents said that the agency procure its products in bulk volume. This can makes favorable prices and contract terms more likely by increasing suppliers' interest in bidding and by providing them with an incentive to offer a competitive price (Islamic republic of Afghanistan, 2015, P.39).

The study revealed that majorly of the respondents (38.6%) were strongly agreed on the fourth statement which says all products except very small or emergency one are procured via competitive bidding (open tendering) and 35.1% of the respondents were agreed on the a same idea. It is one of the good pharmaceuticals procurement practices which are recommended to be implemented by a given procuring entity. Because, it can achieve the lowest price and attract a new potential suppliers (The Global Fund, 2006, P.7)

More than half of the respondents (52.6%) disagreed on statement that requested quantities for procurement are based on reliable estimate of actual need. It is showed that quantity estimation practice of the agency to procure pharmaceuticals is unreliable. This is ultimately leads to product interruption and high cost.

Forecast too low could result in stock outs which trigger expensive emergency procurements and creating a financial strain on limited health care budgets. Forecast too high can cause excess holding costs, storage-capacity strain and an increased chance of products expiring (USAID Delivery, 2011, PP 109-111). According to the study was done by United Nations Commission on Life-Saving Commodities revealed that poor forecasting was one of the challenge of health supply chain to avail the needed pharmaceuticals on time with right quantity sustainably (2014, P.7).

The study sought respondents' level of agreement about key procurement functions that require different expertise are separated in unit, based on this 52.6% of the respondents agreed on the given statement and 22.8% rated strongly agree. But, less number of respondents (1.8% and 5.3%) opposed the idea and 17.5% of them were neutral. Thus, the finding indicated that the agency separated procurement functions which require different expertise as per their characteristics, complexity and requirement. As per management science for health recommendation, all functions of the pharmaceutical procurement process should not be left entirely in the hands of one unit or official to avoid a conflict of interest and increase accountability and transparency(2012, PP 330-336).

35.1% of the total respondents agreed that the agency is done annual financial audit with published results regularly where as 24.6% of them opposed the same point. However, the total number of respondents (43.9%=35.1+ 8.8%) which supported the idea was greater than the total number of respondents that opposed the same idea (38.6%=14.0% + 24.6%). So, it can be concluded that the agency is made annual financial audit regularly. The same result was obtained at Kisumu Water and Sewerage Company (KIWASCO) which said that external audits were conducted on the entire procurement procedure (Ogwang and Waweru, 2017, P.20).

As the table above showed that the agency conduct key procurement performance indicators like ratio of unit price to world market price, supplier lead time and likes because majority of respondents (45.6%) rated agreed and 10.5% of the population rated strongly agreed. The sum of respondents which replied positive response covered more than half of the total respondents. Conducting key procurement performance indicators enables to ensure that pharmaceuticals availability on the right time and place as needed (Islamic republic of Afghanistan, 2015, P.39).

42.1% of the participants did not agree on the point that the agency develops prompt and reliable payment mechanism for suppliers. On the same points 15.8% of the total participants strongly disagree. The same number of respondents (15.8%) supported that the agency develops prompt and reliable payment

mechanism for suppliers. However, majority of the respondents (57.9%) did not accept the stated idea. This may be due to shortage of foreign currency and stock status of the products on hand to open letter of products for suppliers. When late payments by procuring entities become the norm, suppliers may become discouraged and decide not to do business with purchaser organizations. On the other hand, prompt payments of suppliers enhance trust on both partners and enhance timely delivery with quality products (Chepkesis & Keitany, 2018, P.7). The World Bank report supported this particular study by concluding that 38% of the target companies experienced late payments practices in public procurement (2016, P. 38).

4.4.2 Procurement planning practices

One of the interested areas of this particular study was to assess the actual procurement planning practice of the agency. Based on this, the result found from respondents was summarized as per the table below. The finding was expressed by five (5) Likert scale (where 1= strongly disagree(**SD**), 2= Disagree(**D**), 3= Neutral(**N**), 4= Agree(**A**) and 5= Strongly agree(**SA**)).

Table 4: Summary of pharmaceuticals procurement planning practices.

S.N	Procurement planning	SD (F/ %)	D (F/ %)	N (F/ %)	A (F/ %)	SA (F/ %)	mean	SD
1	The agency prepares realistic and achievable procurement plan by considering past experiences, current and future capacity of the agency	2(3.5)	25(43.9)	19(15.8)	17(29.8)	4(7.0)	2.93	1.083
2	Procurement plan of the agency is carried out by multidisciplinary team established specifically for this purpose.	11(19.3)	18(31.6)	10(17.5)	13(22.8)	5(8.8)	2.70	1.267
3	The current procurement planning practice of the agency enables to set key performance indicators (KPI) to measure the performance of each procurement unit and staff	1(1.8)	25(43.9)	12(21.1)	14(24.6)	5(8.8)	2.95	1.059
4	The agency conducts market research before procurement plan to set recent price of the products.	4(7.0)	31(54.4)	6(10.5)	13(22.8)	3(5.3)	2.65	1.077

5	The agency allocates sufficient time for procurement planning prior to initiate procurement process	17(29.8)	23(40.4)	5(8.8)	9(15.8)	3(5.3)	2.26	1.203
6	The agency adheres to its procurement plan to implement accordingly	9(15.8)	23(40.4)	7(12.3)	16(28.1)	2(3.5)	2.63	1.159
7	The agency shares its procurement plan to its relevant stakeholders for their preparedness	8(14.0)	21(36.8)	11(19.3)	13(22.8)	4(7.0)	2.72	1.176
8	Procurement plan of the agency enables to avoid unnecessary emergency and urgencies	2(3.5)	18(31.6)	10(17.5)	16(28.1)	11(19.3)	3.28	1.206
9	Relevant stakeholders and their roles are clearly indicated in procurement plan of the agency.	12(21.1)	16(28.1)	8(14.0)	12(21.1)	9(15.8)	2.82	1.403
10	Expected risks on procurement processes and their proposed solutions are incorporated in procurement plan of the agency.	9(15.8)	26(45.6)	6(10.5)	13(22.8)	3(5.3)	2.56	1.165
Grand Mean							2.75	

Source: Survey questionnaire (2020) *F=frequency*

From the above table 4, out of the total number of the respondents, 43.9% said disagree and 29.8% of them agree on the first questions. But, 15.8% of respondents were neutral on the same point. This showed that most of the respondents didn't agree on the point that the agency prepares realistic and achievable procurement plan by considering past experiences, current and future capacity. However, procurement planning must be realistic and achievable based on past experience and current capacity as well as future demand (USAID, 2011, P 115). A survey that was done by Leggesse with entitled of public procurement practices and challenges in Ethiopia showed that inadequate planning and lack of linkage of demand to the budget were existed in the selected public organizations (2017, P 46). Moreover, one study which was done on Bosnia and Herzegovina (BiH) institutions showed that 89 % of procurement was not completed in accordance with the planned completion deadline and the plan was not based on realistic indicators(EU, 2018, P.33-35). These two previous time surveys supported the finding of this particular study by arriving on similar conclusion.

For question number two in the above, more than half of the respondents (31.6%+19.3%) didn't accept the statement that procurement plan of the agency is carried out by multidisciplinary team. But, 22.8% of the total respondents replied agreed and only 8.8% selected strongly agreed on the same point. Procurement planning should be carried out by a multidisciplinary team established specifically for the purpose to develop, coordinate, implement and monitor the procurement process. This also enables to conduct a rapid situation analysis of the procurement system in order to identify potential problems and ensure availability of product at right time and place (Scheuing and Reilly, 2007, P.4). There is no scientific research which was done on this particular issue but one study which was done at Agricultural Transformation Agency (ATA) of Ethiopia showed that procurement plan is not fully prepared and the plan is failed short to be presented based on the standard and on appropriate time (Damte, 2018, P.48). This can give a clue that there is no responsible body to develop, coordinate, implement and monitor the procurement process including procurement plan.

From the total number of participants, 43.9% of them did not agree on point that the current procurement planning practice of the agency enables to set key performance indicators (KPI) to measure the performance of each procurement unit and staff. On the other hand, 24.6% of the respondents said that the current procurement planning practice of the agency enables to set key performance indicators (KPI) while 21.1% were neutral on this particular point. The remaining respondents said strongly agree and strongly disagree with rate of 8.8% and 1.8% respectively. Even though the respondents had a diverse view, high number of respondents disagreed on current procurement planning practice of the agency enables to set key performance indicators (KPI) to measure performance of procurement unit and staff. Thus, the result showed that procurement planning practice of the agency didn't enable to set key performance indicators. As a literature, Pharmaceuticals planning should support transparency and development of Key Performance Indicators (KPIs) to monitor performance (IAPWG, 2012, P 32)

From the table above, most of the participants (54.4%) disagreed that the agency conducts market research (assessment) before procurement plan to set recent price of the products while 22.8% of them agreed on the same point. As compare the number of respondents on the two extremities, it was observed that higher number of respondents on the left side who opposed the idea. Thus, it is possible to conclude that the agency didn't conduct market assessment to set procurement plan. Procuring bodies should undertake a needs assessment to define the goods or services being procured and prepare a bidding plan, including planning and preparation of budgets (Transparency International, 2015, P.1). Market research is one of the important elements of procurement planning to know potential customers, supplier and recent price of the

products to be procured (FPPA, 2017, P.52). This particular study finding was supported by another study which was done at Western Balkans. Its finding showed that failure to conduct proper market research was one of the root causes of many problems in the public procurement process (EU, 2018, P.24). In addition to this, a study was done on Bosnia and Herzegovina (BiH) institutions showed that there was no proper market analysis to conduct procurement, which caused delays in 22 % of procurements in the implementation phase (EU, 2018, P.33-35).

The study finding ensured that 56.2 % (40.4 % (D) + 15.8 % (SD)) of respondents said that the agency didn't adhere to its procurement plan to implement accordingly. On the other side, 28.1% of the total participants agreed on the stated idea and 3.5% of the respondents strongly agreed. The remaining 12.3% participants were neither agreed nor disagreed on the indicated statement. Moreover, 40.4% of the respondents disagreed on the fifth question which said that the agency allocates sufficient time for procurement planning prior to initiate procurement process and 29.8% of the total participants augment the same idea by selecting strongly disagree scale. In contrast to this, 15.8% of the respondents supported that the agency allocates sufficient time for procurement planning prior to initiate procurement process. As per USAID/Delivery recommendation, procurement planning should be started 24–36 months ahead and be updated regularly to ensure that the right products, in the right quantities; arrive at the right time, in the right condition, at the right price, and to the right place (2011, P 115). On the other hand, a study was done on Bosnia and Herzegovina (BiH) institutions clearly revealed that almost 90% of procurement procedures were not completed in accordance with the planned completion deadline, which indicates planning weaknesses and raises questions on the purpose of planning (EU, 2018, P.33-35). This indicated that this particular finding supported the study finding of Bosnia and Herzegovina (BiH) institutions.

Almost half of the total respondents (50.8%) opposed that the agency shares its procurement plan to its relevant stakeholders for their preparedness. 19.3% of the total respondents did not have any information (neutral) on the same point but 29.8% (22.8%+7.0%) of them said that agency shares its procurement plan to its relevant stakeholders for their preparedness. As compare 50.8% on the left hand and 29.8% right hand, a huge gap was clearly observed. Therefore, it was concluded that EPSA was not shared its procurement plan to its relevant stakeholders for their preparedness. Comparable, reliable, and systematically collected information is crucial for all stakeholders involved in the procurement process (The World Bank, 2016, P. 7). In contrary this particular study finding, a study at KIWASCO ensured that procurement information was shared amongst all interested stakeholders (Ogwang and Waweru, 2017, P.20). A reason of such visible difference was seen on these two studies may be due to awareness gap

between the two organization towards stakeholder's collaboration and partnership. As per the information obtained from detail interview, interviewees confirmed that EPSA staff members have an awareness gap on stakeholders' relationship in general, on supplier relationship in particular.

For question number nine, the respondents reported that 21.1% strongly disagree, 28.1% said disagree, 14.0% neutral while 21.1% agreed and 15.8% strongly agreed. Almost half of the respondents (49.2%) did not accept the idea but 36.9% of the total participants said that relevant stakeholders and their roles are clearly indicated in procurement plan of the agency. There are internal and external stakeholders who involves in procurement process, their active participation and close collaboration can determine procurement effectiveness. It is difficult to have an effective planning without vital input from stakeholders, especially suppliers. Their inclusion in the planning process opens up all types of communication avenues. Information discussed in the planning sessions should enable key suppliers to see the "big picture" of their clients' operations (Scheuing and Reilly, 2007,P.4). One study was done on Public Procurement Oversight Authority of Kenya revealed that lack of feedback mechanism and low stakeholder awareness on procurement information system were some of the challenges of procurement (2007, P 14).

Higher number of respondents (45.6%) was disagreed that expected risks on procurement processes and their proposed solutions are incorporated in procurement plan of the agency and 15.8% of the respondents was strongly disagreed on the same idea. This accounts 61.4% of the total respondents who was opposed the idea. On the other hand, 22.8% of the study participants agreed that expected risks on procurement processes and their proposed solutions are incorporated in procurement plan of the agency and 10.5% of them selected neutral. The remaining little number of participants (5.3%) strongly agrees on indicated point. Risk expectation is one of the elements of procurement planning to achieve more reliable planning, improved decision making and greater certainty of outcomes. By managing risk, procuring entity can identify potential problem areas that may adversely affect the desired procurement outcomes, and try to reduce the uncertainty of outcomes and economic losses (FPPA, 2017, 54). A scientific study was done on Bosnia and Herzegovina (BiH) institutions showed that the institutions didn't take into account all the possible risks that may arise in the procurement process and the time necessary for public procurement is not properly assessed (EU, 2018, P.33-35). So, both this particular study and the other study at BIH institution obtained the same result about risk assessment in procurement.

4.4.3 Supplier relationship management practice

As a part of procurement practice, supplier relationship management practice of the agency was assessed by this particular study. The assessment result was expressed by five (5) point Likert scale (where 1= strongly disagree (**SD**) 2= Disagree (**D**), 3= Neutral (**N**), 4= Agree (**A**) and 5= strongly agree (**SA**))

Table 5: summary of supplier relationship management practices

S.N	Supplier relationship practice	SD (F/ %)	D (F/ %)	N (F/ %)	A (F/ %)	SA (F/ %)	mean	SD
1	EPSA establishes long term commercial partnership with selected suppliers	6(10.5)	11(19.3)	9(15.8)	20(35.1)	11(19.3)	3.33	1.286
2	There is a high level of commitment between the agency and its suppliers	3(5.3)	13(22.8)	12(21.1)	20(35.1)	9(15.8)	3.33	1.155
3	The agency has classified suppliers based on a well-defined set of criteria	11(19.3)	20(35.1)	10(17.5)	11(19.3)	5(8.8)	2.63	1.248
4	Most suppliers of the agency deliver their products on time in full and according to specifications	6(10.5)	20(35.1)	12(21.1)	17(29.8)	2(3.5)	2.81	1.093
5	The agency conducts supplier conferences regularly to demonstrate ways to improve and share future plans	8(14.0)	20(35.1)	10(17.5)	12(21.1)	7(12.3)	2.82	1.269
6	There exist trust between suppliers and the agency	6(10.5)	16(28.1)	9(15.8)	20(35.1)	6(10.5)	3.07	1.223
7	The agency has established a system that encourage information sharing and transparency with suppliers	11(19.3)	21(36.8)	8(14.0)	14(24.6)	3(5.3)	2.60	1.280
8	EPSA regularly organizes events to reward best performing suppliers	11(19.3)	22(38.6)	10(17.5)	7(12.3)	7(12.3)	2.51	1.311
9	The agency continuously monitors the health of the relationships with supplier	13(24.6)	21(36.8)	8(12.3)	9(15.8)	6(10.5)	2.89	1.249

10	There is formal pre bid and post award supplier qualification based on product quality, service reliability, and financial viability	8(14.0)	16(28.1)	14(24.6)	12(21.1)	7(12.3)	2.89	1.249
Grand Mean							2.86	

Source: Survey questionnaire (2020)

For the first question, highest number of respondents (35.1%) was observed under agreed rate as compare with the other. The next highest number of respondents was registered under disagreed and strongly agreed column which scored 19.3% for each. 15.8% of the total participants did not have any information about long term commercial partnership practices of the agency. The remaining 10.5% of the respondents were strongly disagreed on the idea that EPSA establishes long term commercial partnership with selected suppliers. This implies that majority of the respondents supported the statement that EPSA establishes long term commercial partnership with selected suppliers. Supplier relationships have become one of the key interest areas of strategic supply management. The focus has changed from transactional and short-term relationships to collaborative and long-term relations (Lintukangas, 2010, P.1-2). Supplier relationship activities play important role where players willingly share risks and rewards and maintain relationship on long term basis (Nyamasege and Biraor, 2015, P.30). One study was done in Kenya at manufacturing firms supported this particular study finding by identifying that long-term interaction was exhibited between study Company and its supplier with mean of 4.08(agree). In addition, the same study also concluded that most manufacturing firms have embraced collaborative relationships with their existing suppliers (Musanga, Ondari, Kiswili, 2015, P.15).

For question number two, 35.1% of respondents replied agree, 22.8% of them replied disagree, 21.1% neutral and 15.8% strongly agree. The remaining 5.3% of participants replied strongly disagree rate. As shown from the report, more than half of the respondents (50.9%) had positive view on the statement that there is a high level of commitment between the agency and its suppliers but only 28.1% of the total participants had opposite stand on the same idea. Commitment is a service level offered by the suppliers during and after the transaction performed and the willingness to develop their capabilities. The degree of dependability and readiness to provide the company with high quality products ensures the commitment of the supplier as well (Moeller, Fassnacht & Klose, 2014, P.17). One study was done in Kenya at

manufacturing firms showed that a high commitment was exhibited between study Company and its supplier with mean of 4.03(agree) (Musanga, Ondari, Kiswili, 2015, P.15).

35.1% of the respondents replied disagree on the point that the agency has classified suppliers based on a well-defined set of criteria and 19.3% of the total participants were strongly disagreed on the same point. 17.5% of the respondents were neutral while 19.3% were agreed on the indicated statement at question number 3. In general, more than half of the respondents (54.4%) supported that the agency didn't classify its suppliers based on a well-defined set of criteria. But, another study was done at Sports Kenya by Muema in 2016 revealed that the organization has classified its suppliers based on a well-defined set of criteria with rate of great extent (Muema, 2016, P.37). The reason of result finding difference between the two organizations may be due to procurement legal framework difference of the countries, nature of products, accessibility of potential suppliers, staff knowledge level and skill and others.

For question number four, 35.1% of the total respondents said disagree, 10.5% of them said strongly disagree and significant number of respondents replied neutral with rate of 21.1%. On the other hand, 29.8% of the participants were agreed that most suppliers of the agency deliver their products on time in full and according to specifications and only 3.5% of them were strongly agreed on the same idea. This implies that most of the respondents (45.6%) supported that most suppliers of the agency didn't deliver their products on time in full and according to specifications. One study was done at Commercial Bank of Ethiopia (CBE) by Muluaem before six years back showed that late delivery of purchased goods/ service and reliability of suppliers both in terms of availability & quantity for specific items were among some of the procurement challenges of the bank (2014, P.42).

For question number five, 35.1% of the total respondents said disagree, 14.0% of them said strongly disagree and 17.5% were neutral. In contrast to this, 21.1% of the participants were agreed that the agency conducts supplier conferences regularly to demonstrate ways to improve and share future plans and 12.3% of them were strongly agreed on the same idea. This implies that almost half of the respondents (49.1%) supported that most suppliers of the agency didn't conduct supplier conferences regularly to demonstrate ways to improve and share future plans. High frequency of communication and discussion between buyers and suppliers in business would help them a lot in having stronger and more durable relationship. This enables them to build higher degrees of trust and commitment in their relationship (Moeller, Fassnacht & Klose, 2014, P.17).

For the sixth question, most number of respondents (35.1%) replied agree while 28.1% of the respondents disagree. Equal number of respondents replied both strongly agree and strongly disagree with rate of

10.5% for each. The rest 15.8% of respondents were neutral. Thus, majority of the respondents said that there are trust between suppliers and the agency. Trust is the heart and building block of any buyer-supplier relationship. In the relationship with the supplier; the higher the serviceability of the supplier is, the higher the degree of trust created with its buyers (Moeller, Fassnacht & Klose, 2014, P.17). This particular study finding was supported by another finding which was done in Kenya at manufacturing firms. The study at manufacturing firms showed that a high trust was exhibited between study Company and its supplier with mean of 4.08(agree) (Musanga, Ondari, Kiswili, 2015, P.15).

For question number seven, majority of the respondents (36.8%) disagree that the agency has established a system that encourage information sharing and transparency with suppliers while the next highest number of respondents (24.6%) agreed on the same idea. In addition 19.3% of the respondents strongly disagree on the statement. In this regard 14.0% of the respondents had neutral idea. This showed that highest number of respondents which covered 56.1% of the total respondents said that the agency has not established system that encourages information sharing and transparency with suppliers. Supplier relationship activities play important role where players willingly share information, risks and rewards and maintain relationship on long term basis (Nyamasege and Biraor, 2015, P.30). It is vital for the buying firms to develop and foster a close relationship with their suppliers to ensure continuous and sustainable improvements (Amad *et al*, 2008, P.12). Procurement officials must support an open procurement process by consistently applying national procurement regulations and procedures, and international best procurement practices that promote transparency (USAID/ Delivery, 2011, PP 109-111). One study was done at Public Procurement Oversight Authority of Kenya showed that there were lack of feedback mechanism and low stakeholder awareness of web-based procurement information system(2007, P 14). Another study was done at KIWASCO ensured that procurement information was shared amongst all interested stakeholders including supplier (Ogwang and Waweru, 2017, P.20).

For 8th question, most respondents (38.6%) disagreed that EPSA regularly organizes events to reward best performing suppliers and 19.3% of the total respondents also strongly disagreed on the same point. Whereas, equal number of respondents (12.3% for each) was replied agree and strongly agree rate. The remaining 17.5% respondents neither agreed nor disagreed, they were neutral. To sum up, more than half of the total respondents (57.9 %) opposed the idea that EPSA regularly organizes events to reward best performing suppliers but only 24.6% of respondents support the stated idea. Rewards can be presented to the best suppliers as a means to recognize their achievements and to motivate them to maintain and/or improve their performance level (Amad *et al*, 2008, P.12).

More than half of the respondents (61.4%) disagreed (24.6% + 36.8%) on the point that the agency continuously monitors the health of the relationships with its suppliers. On the other hand, 26.3% of participants agreed (15.8% +10.5%) on the same stated point. As per respondents' response, the agency didn't continuously monitor the health of the relationships with its suppliers. Supplier management is the process of selection, administration and monitoring of supplier services and products (Pan American Health Organization, 2006, P.64).

High number of respondents (28.1%) disagreed that there is formal pre bid and post award supplier qualification based on product quality, service reliability, and financial viability but 21.1% of participants agree on the same statement. Under this idea, a significant number of respondents (24.6%) were observed under neutral column. 14.0% of the total respondents replied strongly disagree. A total of 33.4% respondents had positive response on the idea (21.1% agree and 12.3% strongly agree) but 49.2% of the respondents had an opposite view on similar point. This showed that majority of the respondents said that the agency didn't conduct pre bid and post award supplier qualification. Information was got from interview confirmed this idea by explaining that the agency hadn't formal prequalification system to identify short listed supplier to be invited forthcoming tender. Moreover, it also confirmed that there was no formal supplier evaluation system to monitor the suppliers' performance. A formal supplier evaluation system must be established to monitor the suppliers' performance on a periodic basis so that appropriate feedback and corrective actions can bring the poor performing suppliers back on track and acknowledge best performers (Amad *et al.*, 2008, P.13). Prequalification is a process whereby prospective suppliers are assessed against predetermined criteria. Only those that satisfy the set criteria are selected and invited to bid. It is a strategy best used when the procurement entities procure pharmaceuticals on a regular basis to minimize cost and risk for both procurement entities and suppliers (Islamic republic of Afghanistan, 2015, P.22-27). One study was done on manufacturing firms in Malaysia got similar finding by concluding that there was very little formal assessment of the supplier's performance. Even if there was assessment, evaluation was carried out on rare occasions and on an ad-hoc basis and with no clear procedures (Amad *et al.*, 2008, P.13).

4.4.4 Pharmaceuticals procurement challenges

Respondents were asked to select the most prevalent pharmaceuticals procurement challenges of EPSA from nine possible alternatives. They were allowed to select more than one answer from the given alternatives and to add more challenges other than listed if they believed that other unlisted procurement

challenges was there. Based on the response of the respondents, the assessment result was illustrated in table below.

Table 6: pharmaceuticals procurement challenges of EPSA

Code	Procurement Challenges	frequency	percentage	remark
PC1	Inaccurate quantification/forecast data	38	66.67	Percentage was calculated from total participants (57), but their sum may not be hundred since one participant allowed to select more than one answer.
PC2	Lengthy procurement process	46	80.70	
PC3	Delay funding allocation or release	26	45.61	
PC4	Product quality assurance problem	16	28.07	
PC5	Transparency problem throughout the procurement process	3	5.26	
PC6	Weak collaboration with stakeholders	31	54.39	
PC7	Lack of unbiased market information	19	33.33	
PC8	Little experience and training of procurement staff members	18	31.58	

PC9	Inadequate rules, regulations, and structures for pharmaceuticals procurement	23	40.35	
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From the above table, 80.70% of the respondents said that the most prevalent pharmaceuticals challenge of the agency was lengthy procurement process. The next highest number of the respondents (66.67%) replied that inaccurate quantification/forecast data was the most prevalent procurement challenges of the agency. 54.39% of the total respondents' selected weak collaboration with stakeholders as one of the most pharmaceuticals procurement challenges of the agency. The fourth highest number of respondents (45.61%) confirmed that delay funding allocation or release was one of the most prevalent pharmaceuticals procurement challenges. Inadequate rules, regulations, and structures for pharmaceuticals procurement was selected by 40.35% of the respondents as one of the most procurement challenges in the agency. A small number of participants (5.26%) said that transparency problem throughout the procurement process was one of the procurement challenges of the agency.

UN CoLSC report showed that there are different procurement barriers that prevent increase access to life-saving commodities for public like Poor, inadequate, or inaccessible data that makes it difficult to forecast and plan commodity needs, unpredictable and long lead times for delivery of procurements, bureaucratic procurement processes, inconsistent flow of fund(2014,P.46). Gabra indicated that Inadequate rules, regulations, and structures for pharmaceuticals, public sector staff with little experience and training to respond to market situations, insufficiency of government funding and lack of unbiased market information are the most common procurement challenges (2006, P 29).Public procurement of pharmaceuticals is a complex process that engages several stakeholders over an extended period of time. Given the number of stakeholders, the strict nature of procurement procedures are some the challenges of procurement (USAID Delivery, 2011, PP 109-111). Each of the procurement process steps from quantification of requirements to delivery of goods requires a specific amount of time to complete. It is common for the public sector procurement process for pharmaceuticals to take from 10–16 months, and sometimes longer to complete the process (USAID Delivery, 2011, PP 109-111).

A study was done at Commercial Bank of Ethiopia by Muluaem in 2014 found that some of the procurement challenges of the bank were lengthy budget approval process, late delivery of purchased goods/ service and continuous market inflation, which can extend the procurement process(2014,P 42). Another country wide assessment on pharmaceuticals supply management system of Ethiopia revealed that

long procurement lead times, inadequate storage infrastructure, and unsystematic distribution practices were major constraints to pharmaceuticals supply management system in the country (FMOH, 2005, cited in Tesfaye, 2015, P.11). These previous scientific study in different organization supported the finding of this particular study, both of them concluded that lengthy procurement process were one of the procurement challenges.

A study was done in African countries on the pharmaceuticals supply system revealed that the main challenges of health system of the countries unknown demand, lack of transparent procurement procedures, lack of appropriate planning, inadequate budget allocation and quality assurance (WHO, 2006, Cited in Schöpferle, 2013, P.16). Another study was done at Addis Ababa university by Tsega showed that foreign currency and lack of motivation by procurement staff were some of the major factor that make procurement delay(2017, P 54). This particular study was supported by these scientific studies by concluding that inadequate budget allocation, shortage of foreign currency and unknown demand (Inaccurate quantification/forecast data) were some of the procurement challenges of organizations.

A study was done by Damte at ATA found that the most significant problems that delays the procurement processes of agricultural transformation Agency of Ethiopia are regulatory caused by long and strict government rules and process that hinder the efficient service delivery. It also showed that public procurement legal framework gives excess control and authority to the FPPA (2018, P.62).The assessment finding of Damte supported the assessment finding of this particular study by confirming that inadequate rules, regulations, and structures were the challenges of procurement. Another study at the University of Nairobi strength the finding of this result by concluding that existence of inadequate planning, complex regulations by the public procurement act, procurement costs being high and interference by higher management in the procurement processes were some of the key challenges experienced in the procurement (Pereruan, 2016, P.57).

To conclude that the most top five pharmaceuticals procurement challenges of EPSA were lengthy procurement process, Inaccurate quantification/forecast data, weak collaboration with stakeholders, delay funding allocation or release and Inadequate rules, regulations, and structures for pharmaceuticals procurement.

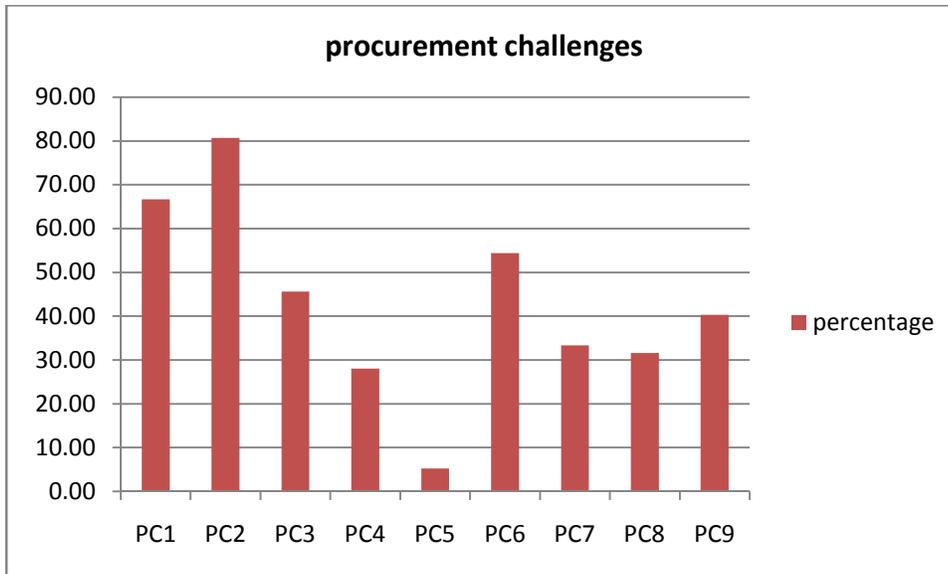


Figure 2: Most procurement challenges of EPISA

4.5 Qualitative data analysis finding

Qualitative data was collected to identify the major challenges of international pharmaceuticals procurement to triangulate result finding from quantitative data. Qualitative data was collected from procurement coordinators (team leaders) who work at different procurement unit and senior procurement professionals by using semi structured interview guideline. In this study nine team leaders and two senior procurement professionals were participated. The objective of this interview is to understand the most procurement challenges of the agency, to understand the actual planning and supplier relationship management practices of the agency and special feature of pharmaceuticals procurement challenges. Thus, this qualitative assessment more focused on challenges of procurement practices. Based on this, the assessment result from interview was organized as per below.

4.5.1 Challenges of pharmaceuticals procurement in Ethiopian Pharmaceuticals Supply Agency

Under this section the interviewees were asked about the presence of procurement challenges in their agency. Based on this, they confirmed that there were different types of procurement challenges in their agency. In general, they can be classified in to two main categories namely internal challenges and external challenges as per interviewees' explanation.

Among internal pharmaceuticals procurement challenges of the agency were weak coordination with internal stakeholders, non value adding procurement process, knowledge gap on procurement process and requirement, poor data quality and traceability, lack of knowledge and skill on procurement legal

framework and procedures of the country, manual working system, non economical procurement order and unplanned procurement request. Procurement is extended from need identification and quantification to delivery of the products in warehouse. In this long process, different functional units are involved directly and indirectly to facilitate the procurement process. Each activity in different functional units interconnected and depends on each other. The output of a given functional units can be used for input of the other. Unfortunately, weak collaboration between different functional units in procurement process of the agency was observed as per interviewees' explanation. Among the manifestation of this, procurement planning was done in different unit (separately) without considering the activities and plan of the other units. Even though the ultimate objective of each procurement units is similar (obtaining the required products in right time with right quantity and quality at right place), they planned separately without incorporating the input of the other units. This made the process difficult to achieve the intended target. There was not well organized formal reporting system from one unit to another to update the procurement process and status.

According to interviewees, there were non-value adding activities and procedures in the procurement process. Such activities take their own time and effort but their value insignificant. For instance, during sending tender evaluation result to procurement endorsing committee, it passed through Deputy General Director office without adding any value on it. Another internal procurement challenges of the agency, was knowledge gap on procurement process and requirement. Some staff members of procurement were not well aware about procurement procedures and requirement to accumulation a given tasks effectively. There was no formal training and capacity build system for procurement staff members before engaging on procurement process activities. Procurement is highly legalized and sensitive areas; each activity has its own legal requirement and many interested bodies. To facilitating the activities without violating law and in balanced way, well skilled experienced staff members are required. Any staff members who involved in the procurement process should be trained on basic procurement process and requirements. In contrast to this, some procurement request were initiated without considering procurement lead time, procurement legal framework of the country, availability of supplier for required products, amount and nature of the products and the likes.

Poor data quality and traceability was another internal challenge of the agency. Quality of data plays a great role to quantify the actual demand of the products and obtain the right quantity. Poor quality of data leads inaccurate quantification which ultimately results in overstock and stock out of life saving products. Procurement lead time, stock on hand amount and its shelf life, stock on pipeline and average monthly

consumption are highly important to quantify the actual demand of the products. The data quality of these all must be accurate and reliable, unless and otherwise it may leads wrong decisions and quantification. From the interview, it was understand that poor data quality was the challenges of the agency to quantify the right quantity.

Literature said that to avoid stock-outs and at the same time to reduce wastage, the procurement requirements of essential pharmaceuticals should be established based on reliable data. The accuracy, reliability and use of quantification results may also be increased through the use of coordination structures and the implementation of standard quantification processes. Accurate quantification increases the confidence of suppliers to participate and offer the lowest prices and increasing effective and efficient use of limited resources (Islamic republic of Afghanistan, 2015, P.39). According to UN CoLSC report showed that there are different procurement barriers that prevent increase access to life-saving pharmaceuticals for public like poor, inadequate, or inaccessible data that makes it difficult to forecast and plan the needed pharmaceuticals, lack of coordination and long lead times(2014,P.46).

Manual working system was another internal challenge of the agency. Such working system takes much time to accumulation a given task and it is not easily traceable to report, communicate, and compare. Because of this, procurement process became lengthy, no easily accessible and bureaucratic. One study done on Ethiopian pharmaceuticals supply management system showed that long procurement lead times, inadequate storage infrastructure, and unsystematic distribution practices were major constraints in pharmaceuticals supply management system of the country (FMOH, 2005, cited in Tesfaye, 2015, P.11). This particular study also revealed that one of the challenges of pharmaceuticals procurement was lengthy procurement process. Quantitative analysis of this particular study also got the same result by concluding that lengthy procurement process, weak collaboration and inaccurate quantification were among the most top procurement challenges of the agency.

As per the information obtained from participants, there are many external stakeholders involved in the procurement process. Their role was invaluable to facilitate the process and receive the required products at right time with good conditions. Some of them are Ethiopian Food and drug authority, commercial bank of Ethiopia, National bank of Ethiopia, suppliers, Ethiopian customs commission, Ethiopian shipping line, Ethiopian Air lines, Federal public procurement and property administration Agency, end users (Hospitals and health centers) and Ethiopian Insurance Corporation. Even thought the agency worked with them to import pharmaceuticals from foreign company, system was not designed to discuss with them about procurement process and its challenges, ways to improve, procedures and requirement of each

organization. Because of this, the agency faced different challenges from its stakeholders like delay to get approved purchase order from regulatory agency; shipments are waiting a long time at port, high custom duty and demurrage cost, urgent and frequent procurement request from its end users and others.

Some suppliers did not submit the required documents as per requirement. Sending incomplete, incorrect shipping document and failing to deliver as per signed contract agreement were some of the challenges of the agency from supplier sides. Moreover, some suppliers didn't have good understanding about procurement process and requirement of the country and they had less experience on international trade and procedures. The cumulative effect of these challenges made the procurement process lengthy, this ultimately fail to get the required products at the right time and place.

Foreign currency shortage was one of the primary challenges of the agency in procurement process as per interviewees' information. Some purchase orders were waiting one year and longer after signing of contract without Letter of Credit (L/C) opening for suppliers due to shortage of foreign currency. For examples, during the assessment time the agency had around 80 million USD purchase orders waiting foreign currency but it only got 37 million USD from national bank of Ethiopia as per the information from participant. This affects the process of the procurement to avail the required pharmaceuticals on time and ultimately will degrade suppliers' and end users' trust on the agency.

Legal framework of the country is affected the procurement process of the agency since it treated pharmaceuticals as general goods. But, pharmaceuticals need special treatment and management system to maintain its quality, stability, safety and efficacy during storage and transportation. According to federal public procurement agency directive, all procurement should be made via international competitive bidding (ICB) except products with special cases to get new potential suppliers and obtain the products with least price. On the other hand, Ethiopian Food and Drug Authority (EFDA) rules and regulation enforce to purchase pharmaceuticals only from registered company (company with market authority certificate from EFDA). This implies that procuring agency should purchase its products via close tender (inviting limited number of suppliers) from only registered company without considering other interested suppliers to get quality products. Unfortunately, the two organizations did not have a joint discussion forum to balance and harmonized their requirement to avail life saving pharmaceuticals for the public of Ethiopia. Moreover, the agency procures about 1372 essential pharmaceuticals throughout the world but the number of registered pharmaceuticals by regulatory Authority was limited. This affects the procurement process of the agency to obtain the required products as per its plan since it took a long time to approve purchase order and facilitate port clearance of unregistered pharmaceuticals.

To conclude weak collaboration with external stakeholders, foreign currency, and legal framework of the country were some of the external procurement challenges of the agency as per interviewees' explanation. According to the report of the agency, inadequate integration and absence of joint-discussion forum with major stakeholders such as banks, insurance, Ethiopian Air line, ESL, suppliers, ERCA and FMHACA resulted in a long delay in availing pharmaceuticals on time (PFSA, 2016, pp 4 -5). An assessment was done at Addis Ababa University by Tsega supported the finding of this particular research by observing that shortage of foreign currency and different amendments from banks and lack of motivation were the major factor that make procurement delay (2017, P 54). Furthermore, quantitative analysis of this particular study also obtained the same result by concluding that delay funding allocation or release, weak collaboration with stakeholders, inadequate rules, regulations, and structures for pharmaceuticals procurement were among the most procurement challenges of the agency. As per participants' information, pharmaceuticals have special nature and characteristics like they need special storage conditions, handling and packaging to maintain their stability and safety in supply chain systems. Some pharmaceuticals have short shelf life but a supply chain root of the agency was long to deliver the products from manufactures up to end users. This made the process was challenging to manage pharmaceuticals. Untrained human powers who involved in supply chain of pharmaceuticals, especially during transportation and at the port, was another challenges to give special attention for them.

Weak supplier relationship management practice was one of the challenges of procurement process as per interviewees' information. They said that the agency didn't design a system to evaluate the performance of its suppliers to identify best performers and poor performer. Moreover, regular discussion with potential suppliers was not made except Anti Retro viral medicines (HIV/AIDS) suppliers. The participants said that more challenges were originated from supplier related issue since many new suppliers won a tender of the agency but less experienced to facilitate the process of procurement and they need more clarification and explanation to perform as per signed contract. This indicated that the agency didn't have a prequalified list of suppliers who were invited in its tender; this made the process challenging and lengthy. Another challenges mentioned by participants was weak procurement planning practice of the agency. The procurement planning practice of the agency had many weaknesses like relevant internal and external stakeholders didn't involve to provide their input during planning, unreliable data were used to plan, the plan of the agency were not distributed to all internal and external procurement role players of the agency for their preparedness and cooperation. This created away to make urgent procurement request due to poor data and weak collaboration from unaware stakeholders.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides summary of the study findings, conclusion and recommendation. Conclusions were drawn from the result of the study that was discussed so far at chapter four. Based on the conclusion recommendations were forward to concerned body for future improvement and betterment. Finally, further studies suggestion was included.

5.2: Summary of the finding

Under this section summary finding of good pharmaceuticals procurement practices, procurement planning practices, supplier relationship management practices and most procurement challenges of the agency were included.

5.2.1 Summary of finding on good pharmaceuticals procurement practices

Majority of the respondents were strongly agreed (43.9%) that all products are procured with their generic names and 36.8% of the respondents agreed on the same points. Another study which was done in Kenya at Narok County Referral Hospital showed that pharmaceuticals procurement were ordered with their generic name ,which was similar with this particular finding(Muhia, Waithera and Songole, 2017, P.4).

70.2% of the respondents (sum of 40.4% agreed and 29.8% strongly agree) confirmed that procurement was made from pharmaceuticals procurement list of the agency. Similar study was done in Kenya in 2017 arrived on similar conclusion; it said that selection of drugs for procurement was based on the national essential pharmaceuticals list (Muhia, Waithera and Songole, 2017, P.4).

The sum of respondents which selected agrees (42.1%) and strongly agrees (12.3%) covered more than half of the total target population (respondents). This implies that most of the respondents said that the agency procure its products in bulk volume. Procuring in bulk can makes favorable prices and contract terms more likely by increasing suppliers' interest in bidding and by providing them with an incentive to offer a competitive price (Islamic republic of Afghanistan, 2015, P.39).

More than half of the respondents (52.6%) disagreed on the statement that requested quantities for procurement are based on reliable estimate of actual need. According to the study was done by United Nations Commission on Life-Saving Commodities revealed that poor forecasting was one of the challenge

of health supply chain to avail the needed pharmaceuticals on time with right quantity sustainably (2014, P.7).

Majority of the respondents (57.9%) did not accept the idea that the agency develops prompt and reliable payment mechanism for suppliers. The World Bank report supported this particular study by concluding that 38% of the target companies experienced late payments practices in public procurement (2016, P. 38).

5.2.2 Summary of finding on procurement planning practices

Most of the respondents (43.9%) disagreed on the point that the agency prepares realistic and achievable procurement plan by considering past experiences, current and future capacity of the agency but 29.8% of them agree on the same statement. A survey that was done by Leggesse with entitled of public procurement practices and challenges in Ethiopia showed that inadequate planning and lack of linkage of demand to the budget were existed in the selected public organizations (2017, P 46). Moreover, one study which was done on Bosnia and Herzegovina (BiH) institutions showed that 89 % of procurement was not completed in accordance with the planned completion deadline and the plan was not based on realistic indicators(EU, 2018, P.33-35).

More than half of the respondents (31.6%+19.3%) didn't accept the statement that procurement plan of the agency is carried out by multidisciplinary team. But, 22.8% of the total respondents replied agreed and only 8.8% selected strongly agreed on the same point. As per the literature, procurement planning should be carried out by a multidisciplinary team established specifically for this purpose, with the participation of different technical and administrative professionals who have experience in procurement and supply management public health supplies, and have knowledge and experience of national public health programs (Scheuing and Reilly, 2007, P.4).

Most of the participants (54.4%) disagreed that the agency conducts market assessment before procurement plan to set recent price of the products while 22.8% of them agreed on the point. This showed that higher number of respondents opposed the idea. This particular study finding was supported by another study which was done at Western Balkans showed that failure to conduct proper market research was one of the root causes of many problems in the public procurement process (EU, 2018, P.24).In addition to this, a study was done on Bosnia and Herzegovina (BiH) institutions revealed that there was no proper market analysis to conduct procurement, which caused delays in 22 % of procurements in the implementation phase (EU, 2018, P.33-35).

Higher number of respondents (45.6%) disagreed that expected risks on procurement processes and their proposed solutions are incorporated in procurement plan of the agency and 15.8% of the respondents was

strongly disagreed on the same idea. This showed that 61.4% of the total respondents who opposed the idea. A scientific study was done on Bosnia and Herzegovina (BiH) institutions showed that the institutions didn't take into account all the possible risks that may arise in the procurement process and the time necessary for public procurement is not properly assessed (EU, 2018, P.33-35). So, both this particular study and the other study at BIH institution obtained the same result about risk assessment in procurement.

5.2.3 Summary of finding on supplier relationship management practice

More than half on the respondents (54.4%) supported that the agency didn't classify its suppliers based on a well-defined set of criteria. But, another study was done at Sports Kenya by Muema in 2016 revealed that the organization has classified its suppliers based on a well-defined set of criteria (Muema, 2016, P.37). The reason of result finding difference between the two organizations may be due to procurement legal framework difference of the countries, nature of products, accessibility of potential suppliers, staff knowledge level and skill and others.

Almost half of the respondents (49.1%) supported that most suppliers of the agency didn't conduct supplier conferences regularly to demonstrate ways to improve and share future plans. High frequency of communication and discussion between buyers and suppliers in business would help them a lot in having stronger and more durable relationship. This enables them to build higher degrees of trust and commitment in the relationship as well (Moeller, Fassnacht & Klose, 2014, P.17).

57.9 % opposed the idea that EPSA regularly organizes events to reward best performing suppliers but only 24.6% of respondents support the stated idea. The same result was obtained from qualitative analysis by confirming that the agency didn't organize events to reward best performing suppliers.

A total of 33.4 %(21.1% agree and 12.3% strongly agree) respondents had positive response on the idea that formal pre bid and post award supplier qualification were made based on product quality, service reliability, and financial viability but 49.2% of the respondents had an opposite view on similar point. This showed that the agency didn't conduct pre bid and post award supplier qualification. Information was got from interview confirmed this result by explaining that the agency hadn't formal prequalification to identify short listed supplier to be invited upcoming tender. Moreover, it also confirmed that there was no formal supplier evaluation system to monitor the suppliers' performance. One study was done on manufacturing firms in Malaysia got similar finding by concluding that there was very little formal assessment of the supplier's performance. Even if there was assessment, evaluation was carried out on rare occasions and on an ad-hoc basis and with no clear procedures (Amad *et al*, 2008, P.13).

5.2.4 Summary of finding on Pharmaceuticals procurement challenges

From the total participants, 80.70% of them said that the most prevalent pharmaceuticals challenge of the agency was lengthy procurement process. The next highest number of the respondents (66.67%) replied that inaccurate quantification/forecast data was the most prevalent procurement challenges of the agency. 54.39% of the total respondents' selected weak collaboration with stakeholders as one of the most pharmaceuticals procurement challenges of the agency. The fourth highest number of respondents (45.61%) confirmed that delay funding allocation or release was one of the most prevalent pharmaceuticals procurement challenges. Inadequate rules, regulations, and structures for pharmaceuticals procurement was selected by 40.35% of the respondents as one of the most procurement challenges in the agency. A small number of participants (5.26%) said that transparency problem throughout the procurement process was one of the procurement challenges of the agency. UN CoLSC report showed that there are different procurement barriers that prevent increase access to life-saving commodities for public like Poor, inadequate, or inaccessible data that makes it difficult to forecast and plan commodity needs, unpredictable and long lead times for delivery of procurements, bureaucratic procurement processes, inconsistent flow of fund(2014,P.46). In addition, Gabra indicated that inadequate rules, regulations, and structures for pharmaceuticals, public sector staff with little experience and training to respond to market situations, insufficiency of government funding and lack of unbiased market information are the most common procurement challenges (2006, P 29). The Same result was got from qualitative analysis of this study.

5.3 conclusion

Based on the finding of the result and discussion, the following conclusion is drawn about procurement practice and challenges of the agency.

Pharmaceuticals procurement is somehow different from other commercial goods procurement due to special nature of pharmaceuticals. They are expensive, sensitive to the environment; determine the health status of a given community and require trained human power on the area. They have significant commercial and health value in the given country. The products have to be managed and controlled by health system to maintain their safety, efficacy, stability and quality within a supply chain. Because of this, health supply regulatory agencies set special requirement and procedure for pharmaceuticals procurement. Good pharmaceuticals procurement principles (practices) are one of the requirements of health system regulatory agencies and responsible bodies to make effective pharmaceuticals procurement. Under this particular study the agency is evaluated against good pharmaceuticals procurement practices and it fulfills most requirements except reliable quantification and prompt payment system. The agency procures the

required pharmaceuticals with their generic name from its pharmaceuticals procurement list. This is very important to avoid confusion with different types of brand name and to enhance familiarity with international accepted name. It also opens an opportunity for multiple generic manufactures with standard quality and least price to participate on procurement invitation of the agency. Moreover, the study shows that Procurement is made in bulk volume via competitive bidding (open tendering). Procuring in bulk volume helps to attract the interest of more suppliers to participate in the tender. This enhances the probability of getting least price due to high competition between suppliers and obtaining price discount for high volume purchase. Besides, competitive bidding practice is appreciated to get new potential suppliers, get least price and give a chance for all interested participants. The agency separate key procurement functions which needs different expertise as per their nature, characteristics, complexity and requirement. This is helpful to ensure transparency, avoid conflict of interest, and facilitate procurement process as well as identify accountability. The agency makes annual financial audit and measure key performance indicators against its plan. This is very important to know the actual status of the agency for retaining good achievement and improving its weakness. But, to measure the performance of a given company and to know the actual performance, accurate procurement plan has profound importance. Without accurate and reliable procurement plan, measuring performance may lead unwanted decision making.

On the other hand, the study finding showed that the agency has a weakness to quantify a reliable procurement need and to make prompt payment for suppliers. Unreliable quantification may be due to poor quality of data, unskilled human power in the procurement process and weak collaboration with relevant stakeholders. This ultimately leads to over quantification and under quantification. Both of them have their own disadvantage in supply chain effectiveness and efficiency. Late payment for suppliers may be caused by foreign currency shortage and weak collaboration with national bank of Ethiopia to secure sufficient amount of foreign currency in advance as per annual procurement plan of the agency. Late payment affects the trust of supplier to work with the agency for upcoming tender and leads products interruption.

The assessment finding reveled that procurement planning of the agency has many weakness. But, the effectiveness of all other subsequent procurement processes depends on accurate procurement plan. It indicates right quantity to be procured, the right time when the products procured, responsible bodies who participate in procurement process and their roles as well as expected challenges (risk) in the process and proposed solution. The existence of data quality and traceability, close stakeholders collaboration, past experience and current capacity status of the agency are valuable prerequisite to set reliable procurement plan.

As per the study finding, the agency fails to prepare realistic and achievable procurement plan by considering past experiences, current and future capacity of the agency. Unreliable procurement plan can affect the whole procurement process. Moreover, unachievable procurement plan degrade the status of the agency, create bad image on its stakeholders and dissatisfy its employees. It is impossible to measure and know the actual status of the agency without realistic and achievable procurement plan. Pharmaceuticals Procurement planning activities of the agency has not multidisciplinary team to prepare plan, monitor procurement status and assess expected risk. This team is very important to observe different opportunities and threat in different direction. This also enables to obtain relevant input from different procurement level, stakeholders, professional perspective and experience to enhance the effectiveness of procurement process and minimize hindering factors. It is also useful to get accountable body for procurement plan reliability and achievability.

The agency does not allocate sufficient time for procurement plan prior to initiate procurement process. However, Procurement plan is a base of all activities of any procuring entities to obtain the required products within scheduled time. The process of gathering relevant data from different stakeholders, assessing past experience and current capacity, securing required budget and getting the right quantity may take a long time. Thus, procurement planning needs sufficient time to prior to procurement process initiation to avoid poor performance, unnecessary wastage due to poor plan and improve the achievement of procuring company. This also enables to adhere on procurement plan due to workable schedule and facilities. As per the study finding, EPSA does not involve relevant stakeholders in its procurement plan and fails to state their role. Moreover, procurement plan of the agency is not shared for relevant stakeholders for their in advance preparation. Involving relevant stakeholders in procurement plan preparation is very important to incorporate valuable inputs and get feedback from them. Procurement needs collaboration and involvement of both internal and external stakeholders to facilitate its process and get the required products within scheduled time. To get such collaboration, prior input from them and making part of planning is playing indispensable role to prepare workable plan. Not only involving them in procurement planning preparation but also indicating their role in the procurement plan enhances the responsibility of ownership and belongingness.

The agency does not include expected risks and their proposed solutions as part of its procurement plan. Incorporating expected risk can minimize procurement challenges and unnecessary wastage of resources. Proposed solution for risks also uses as strategy to alleviate the effect of procurement risk and avoid products interruption due to unexpected situations.

The study finding indicates that supplier relationship practice of the agency has both strength and weakness. In procurement process, many stakeholders involve to obtain the required products at right time with standard quality. Among them suppliers are the primary stakeholders in procurement process; their involvement in procurement process may extend from procurement plan up to delivery of the products at warehouse. The current procurement practices is changed from mere buying to long term partnership for better service, sustainable product supply, minimize cost and alleviate challenges. Thus, close collaboration, regular discussion and formal performance evaluation are very important to sustain buyer-supplier relationship and ensure sustainable quality product supply.

The study revealed that EPSA establishes long term commercial partnership with selected suppliers. It is appreciated practice to avail life saving products with minimized cost. It also important to improve quality of products, obtain the products with prompt time and enhance serviceability. There is a high level commitment between supplier and the agency, which is one of a component of good buyer-supplier relationship. This makes comfortable situation to create long term partnership and to exploit the fruit full result of partnership. In addition to this, the finding shows that trust is existed between suppliers and the agency. Trust is the building block to maintain long term relationship in procurement.

On the other, the agency has not classified its suppliers based on a well-defined set of criteria. It is difficult to create long term relationship with all suppliers so that classifying suppliers based on product importance, annual demand volume, distance of suppliers from buyer, product availability, product price and related costs is very important to prioritize relationship with selected suppliers. This also enables the procuring entities to conduct regular suppliers' conferences. Moreover, the study indicates that formal pre bid and post award supplier performance evaluation are not conducted as per product quality, service reliability, financial viability and other acceptable criteria. Pre bid qualification can minimize supplier related challenges due to inferior product quality, less experienced entrant and immature capacity. Pre bid qualification can alleviate the challenges from regulatory body of the country due to new unregistered suppliers. It can also enhance close collaboration between procuring entities and regulatory agency by fulfilling the requirement of regulatory body to import quality pharmaceuticals. Moreover, regular post performance evaluation of supplier is crucial to sustain relation with good performer and exclude poor performer from upcoming tender. Supplier performance evaluation is also useful to acknowledge and reward best performer supplier to motivate them for better service and improvement.

The most prevalent pharmaceuticals procurement challenges of EPSA were lengthy procurement process, inaccurate quantification/forecast data, weak collaboration with stakeholders, delay funding allocation or

release and inadequate rules, regulations, and structures for pharmaceuticals procurement. The other challenges of the agency are knowledge gap on procurement process and requirement, poor data quality and traceability, lack of knowledge on procurement legal framework of the country, manual working system, unplanned procurement request and special nature of pharmaceuticals.

5.3 Recommendation

Based on the conclusion of the study the following points are recommended:-

- ✓ Ethiopian pharmaceuticals Supply Agency should develop reliable quantification method by improving its data quality and traceability, involving relevant stakeholders and building staff members skill and knowledge to make effective procurement process.
- ✓ Procurement plan of the agency should be prepared by responsible multidisciplinary team based on concrete evidence by involving relevant stakeholders and by indicating expected risk in the procurement process.
- ✓ Performance evaluation of the agency should be based on reliable and achievable procurement plan unless it can't indicate the true image and status of the agency and its staff members.
- ✓ Ethiopian pharmaceuticals supply Agency should develop prompt payment system for its supplier by collaborating with national bank of Ethiopia to secure foreign currency in advance as per procurement plan of the agency.
- ✓ The agency should classify its supplier based on products availability, importance, price and volume of demand to prioritize collaboration relationship with selected suppliers.
- ✓ The agency should have prequalification list of supplier with regular update to invite limited suppliers in its tender based on their quality, capacity and performance status to avail the needed pharmaceuticals sustainably and minimize supplier relationship challenges as well as to establish regular discussion forum with them.
- ✓ The performance of each supplier should be measured regularly and notify the result officially for respective suppliers. Based on their performance, the agency should reward best performers to motivate them for better service and build good relationship. Moreover, it enables to exclude poor performer from its subsequent tender in order to minimize supplier related challenges and improve product quality and accessibility.
- ✓ The agency should arrange regular discussion forum with its major stakeholders to receive appropriate feedback from them, to propose acceptable solution for existed challenges and to

explain social and economical value of the products to be procured. This can alleviate procurement challenges from stakeholders' sides and create sense of ownership to public property and health. In addition to this, the agency should share its procurement plan for them prior to procurement process initiation in order to prepare themselves in advances.

5.4 Suggestion for further study

The assessment finding of this particular study has contributed its own role about pharmaceuticals procurement practices and its challenge of the agency. It disclosed the actual pharmaceuticals procurement practices of the agency like good pharmaceuticals procurement practices, procurement planning and supplier relationship management practices and its challenge in the process. It will use as reference for other investigators to conduct more comprehensive research on similar or related issue and it can also use for the agency to improve its procurement weakness and alleviate its challenges based on the finding of this particular study . The study was not free from limitation like it was done with limited number of sample size, it only focused on EPSA staff members who directly involved in the procurement processes although there are many stakeholders involving in procurement process of the agency, its specific objectives were broad to address them in detail, it fails to relate procurement practices and its challenges and its only focused on international procurement practice and challenges without considering to local procurement of the agency. The study was used descriptive research design with qualitative and quantitative research approach by using self administered questionnaires and semi structured interview guideline to collect the required data about pharmaceuticals procurement practices and challenges of the agency.

Thus, the investigator of this assessment suggest to other interested researchers to make comprehensive research on similar or related issue by excluding the limitation of this specific research. Interested researchers are advised to conduct similar title and objectives with different variable and research methodologies or by using each specific objective as general objectives in their study to investigate the detail procurement practices of the agency.

Moreover, it is recommended to assess the procurement practice and its challenges separately to understand in depth and well. Relating to this, future researchers are advised to include all relevant stakeholders of the agency who are involved in pharmaceuticals procurement process to observe untouched issues.

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Questionnaire

Addis Ababa University
College of business and Economics
School of commerce

Questionnaire on Assessment of pharmaceuticals procurement practices and explore its challenges in the case of Ethiopian Pharmaceuticals Supply Agency.

Dear respondent; my name is Seifu Moges, who is conducting a study entitled “***Assessment of pharmaceuticals procurement practices and explore its challenges in the case of Ethiopian Pharmaceuticals Supply Agency***” for the partial fulfillment of Master of Art Degree in Logistics and Supply Chain Management at Addis Ababa university. The purpose of this questionnaire is to analyze the current pharmaceuticals procurement practices and its challenges of EPSA. The questionnaire contains 08 pages including this cover page and five sections with different types of questions. It may take 15-20 minutes of your valuable time; please take time to decide to participate in this study. Your genuine answers are highly valuable for this particular study to arrive a right conclusion. Therefore, I kindly request you to complete it as much as you can to obtain best and reliable result. Your response will be kept confidential during and after completion of this research. If you face any ambiguity or questions don't hesitate to contact the investigator via email and phone address indicated below.

Thank you very much for your participation!

Email: serekebi@gmail.com

Mobile: +251921256151

Section I: General information

Demographic data of the respondent (*please encircle your response*)

1. Gender
 - a. Male
 - b. Female
2. Profession
 - a) Pharmacy
 - b) Laboratory technology
 - c) Biomedical Engineer
 - d) Accounting and finance
 - e) Management
 - f) Other (specify).....
3. Age
 - a) 18-24
 - b) 25-31
 - c) 32-38
 - d) 39-45
 - e) Above 45
4. Current educational status
 - a) Diploma
 - b) Degree
 - c) Master
 - d) Other (specify).....
5. Current position at EPSA
 - a) Officer
 - b) Coordinator
 - c) Director
 - d) Technical advisor
 - e) Other (specify).....
6. Total years of experience as procurement staff member at EPSA.
 - a) 1 -3 years

- b) 4-6 years
 - c) More than six years
7. In which directorate you are currently working?
- a) Tender management
 - b) Contract management
 - c) Quantification and market shaping

Section II: Procurement practice against good pharmaceuticals procurement

Based on the current pharmaceuticals procurement practices of the agency, please indicate your level of agreement by placing a **tick(√)** under the column of the word Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree for each corresponding statements.

(Key =1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree 5 = Strongly Agree)

<i>Seri no</i>	Good pharmaceuticals procurement practice of EPSA	Strongly disagree(1)	disagree (2)	Neutral (3)	agree(4)	Strongly agree(5)
1	All products are procured with their generic names (international non-proprietary names)					
2	Products to be procured are limited to pharmaceuticals procurement list of the agency.					
3	Procurement is always made in bulk volume					
4	All products except very small or emergency one are procured via competitive bidding (open tendering).					
5	Requested quantities for procurement are based on reliable estimate of actual need					
6	Key procurement functions that require different expertise are separated in units					
7	There is a formal system for product quality assurance program.					
8	Annual financial audit with published results is done regularly to assess compliance with procurement procedures and promptness of payment.					
9	Key procurement performance indicators like ratio of unit price to world market price, supplier lead time, percentage of purchases made through competitive					

	tendering, planned versus actual purchase against targets are done and reported to concerned bodies regularly.					
10	The agency develops prompt and reliable payment mechanism for suppliers.					

Section III: Procurement planning practice

To what extent do you agree or disagree to the following statements about procurement planning practice of the agency on a Likert scale where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree 5 = Strongly Agree

Seri no	Procurement planning practice of EPSA	Strongly disagree(1)	disagree(2)	Neutral(3)	agree(4)	Strongly agree(5)
1	The agency prepares realistic and achievable procurement plan by considering past experiences, current and future capacity of the agency.					
2	Procurement plan of the agency is carried out by multidisciplinary team established specifically for this purpose.					
3	The current procurement planning practice of the agency enables to set key performance indicators (KPI) to measure the performance of each procurement unit and staff.					
4	The agency conducts market research before procurement plan to set recent price of the products.					
5	The agency allocates sufficient time for procurement planning prior to initiate procurement process.					
6	The agency adheres to its procurement plan to implement accordingly.					
7	The agency shares its procurement plan to its relevant stakeholders for their					

	preparedness.					
8	Procurement plan of the agency enables to avoid unnecessary emergency and urgencies					
9	Relevant stakeholders and their roles are clearly indicated in procurement plan of the agency.					
10	Expected risks on procurement processes and their proposed solutions are incorporated in procurement plan of the agency.					

Section IV: Supplier relationship management (SRM) practice

Evaluate the current supplier relationship management practice of the agency by indicating your level of agreement for each statement by placing a **tick (√)** under the given column.

(Key =1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree 5 = Strongly Agree)

<i>Seri no</i>	<i>Supplier relationship management practice of EPSA</i>	Strongly disagree(1)	disagree(2)	Neutral(3)	agree(4)	Strongly agree(5)
1	EPSA establishes long term commercial partnership with selected suppliers.					
2	There is a high level of commitment between the agency and its suppliers.					
3	The agency has classified suppliers based on a well-defined set of criteria					
4	Most suppliers of the agency deliver their products on time in full and according to specifications					
5	The agency conducts supplier conferences regularly to demonstrate ways to improve and share future plans.					
6	There exist trust between suppliers and the agency					

7	The agency has established a system that encourage information sharing and transparency with suppliers.					
8	EPSA regularly organizes events to reward best performing suppliers.					
9	The agency continuously monitors the health of the relationships with supplier					
10	There is formal pre bid and post award supplier qualification based on product quality, service reliability, and financial viability					

If you have any additional points about procurement practices of the agency, please write on the space provided at below.

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Section V: Pharmaceuticals Procurement challenges

- 1) Is there any procurement challenge in your organization/EPSA?
 - A. Yes
 - B. No
- 2) If your answer is “yes” for question No 1, select **the most prevalent** pharmaceuticals procurement challenges of EPSA from the alternative given below (*You may have more than one answer*)
 - a. Inaccurate quantification/forecast data
 - b. Lengthy procurement process
 - c. Delay funding allocation or release

- d. Product quality assurance problem
- e. Transparency problem through the procurement process
- f. Weak collaboration with stakeholders
- g. Lack of unbiased market information
- h. Little experience and training of procurement staff members
- i. Inadequate rules, regulations, and structures for pharmaceuticals procurement
- j. Other (please specify).....

Thank you very much for your cooperation and participation!

Interview Guideline

Addis Ababa University
College of business and Economics
School of commerce

Interview Guideline to explore Pharmaceuticals procurement challenges.

Interview questions to Directors and team leaders of procurement staffs who are working at Quantification and market shaping directorate, tender management directorate and contract management directorate

- I. Introduce your self
- II. Elaborate the procedure that you follow to facilitate procurement processes in your directorates.
- III. Do you think there are challenges of pharmaceuticals procurement in Ethiopian Pharmaceuticals Supply Agency?

A. Yes

B. No

- IV. If your answer is “Yes”, what are the main pharmaceuticals procurement challenges of the agency? Briefly explain

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.....
.....
.....
.....

- V. Are there any special challenges on pharmaceuticals procurement but not other goods procurement?

If yes, please specify

- VI. How to practice your pharmaceutical procurement planning?
- VII. How to manage your supplier relation?
- VIII. Is there any relation your procurement practice and existed procurement challenge? If so, how?

Thank you very much for your cooperation and participation