Pharmaceutical management

Session objectives

At the end of this session students will be able to:

- Define supply chain mgt
- Describe importance of pharmacy services in health facilities
- Explain drug and therapeutic committee functions
- Describe bases of developing facility specific pharmaceuticals
- Explain functions of pharmaceuticals supply mgt

Introduction

- A supply chain is a set of organizations directly linked by one or more upstream and downstream flows of products, services, finances, or information from a source to a customer

- Supply-chain management (SCM) has been defined as the design, planning, execution, control, and monitoring of supply-chain activities

- The objective of SCM is creating net value, building a competitive infrastructure, leveraging worldwide logistics,

Intro…

- Pharmacy service is the last and critical step for client’s services in HFs
- The ultimate health outcome is determined by appropriate selection, quantification, procurement and rational use of pharmaceuticals
- Pharmacy services should be designed to provide assurance that quality and safety is maintained at all stages of service provision

Drugs and Therapeutics Committee (DTC)

- HFs are expected to establish a functional Drug and Therapeutics Committee (DTC) having multidisciplinary representative members
- It aims at bringing all the relevant professionals to work jointly to improve health-care delivery
- DTC has the responsibility of promoting the safe, rational and cost effective use of pharmaceuticals
- More DTC members provides greater expertise, reduce workload for individuals and increase chance of DTC decision implementation

DTC …

- Considering this, HFs level DTC shall have the following members, as a minimum:
  - Chief clinical officer, or equivalent (Chairperson)
  - Pharmacy head/director (Secretary)
  - Head of laboratory department
  - Nursing service head
  - Head of clinical departments (internal medicine, surgery, pediatrics, gyn-Obs, etc.)
  - Head of finance department
  - Representative from other services as deemed necessary

DTC …

- Other non-voting, non-executive participant can be invited to attend DTC meetings to discuss specific issues that require their particular expertise

- All DTC members, especially the chair and secretary, should be given sufficient time for their DTC functions and this should be included in their job descriptions

DTC…

Proceedings of DTC meetings

- The DTC should meet at a minimum every two months, or more often as the need arises
- Minutes should be kept of all DTC meetings

- The agenda, supplementary materials and minutes of the previous meeting should be prepared by the secretary and distributed to members for review in sufficient time before the meeting

- These documents should be kept as permanent records of the HF and should be circulated to HF management and all HF departments

DTC…

- All DTC recommendations should be disseminated to the medical staff and other concerned parties and authorities in the facility

- 75% of the membership of the committee will constitute a quorum for any meeting and 50% plus members support will approve decision of any discussed issue

- The DTC should cooperate and share experiences with other HFs committees and regional or national DTCs

DTC...

Roles and responsibilities of the DTC

- The DTC should develop TOR detailing the objectives, scope, meeting frequency, membership of DTC, roles and responsibilities of the DTC and each member

- The committee is expected to develop and implement annual action plan in line with the following roles and responsibilities

DTC…

1. The DTC develops and maintains the hospital’s specific list of pharmaceuticals
2. Preparation of standard operating procedures (SOPs) and guidelines needed to ensure provision of proper pharmacy services
3. The DTC promotes the adoption and utilization of standard treatment guidelines (STG)
4. Establishing mechanisms to identify and address drug use problems
5. establishment and overseeing the Drug Information Service (DIS)

Facility Specific Drug List / Medicines Formulary Manual

- All HFs shall develop facility specific pharmaceuticals list comprised of medicines, medical supplies, consumable medical equipment and laboratory reagents

  - They need to be prioritized as vital (V), essential (E) and non-essential (N)

- HF specific pharmaceuticals list should be prepared by multi-disciplinary team of health professionals drawn from clinical, laboratory, pharmacy, and imaging departments

Facility…

VEN:

- V= Vital: potentially lifesaving and crucial to providing basic health services.
- E= Essential: effective against less severe but significant illness. Not vital.
- N= Non-essential: effective for minor illness but have high cost and low therapeutic advantage

Facility …

- The selection of pharmaceuticals for the HF specific medicines list/ formulary manual should be based on:
  - The local pattern of disease
  - The national standard treatment guidelines (STGs)
  - The recent national drug list (List of drugs for Ethiopia)
  - Health services package given by the HF
  - Availability of expertise in the facility (specializations)
  - Diagnostic capacity of the HF

Facility…

- During preparation of the drug list /formulary emphasis should be placed on:
  - Medicines description using generic names
  - Dosage form and strength – in basic units (e.g: Amoxicillin 500mg capsule)
  - Inclusion of a limited number of drugs to improve drug availability, adherence to treatment, focused prescribing, and to simplify supply mgt

Facility...

- The pharmaceuticals list should be reviewed and updated at least annually

- Procurement, prescribing and use practices should be based on the list
- Procurement should be monitored using VEN and other analysis methods

- The pharmaceuticals list should be available in clinical departments, the pharmaceuticals store, dispensaries, laboratory, finance, etc. to be used as references

Pharmaceutical supply management

- To ensure uninterrupted supply of safe, effective and quality pharmaceuticals, the HFs pharmacy shall have effective and efficient supply chain management system

- Critical issues regarding pharmaceuticals:
  - Regular assessment of stock status
  - Right selection, Right quantities
  - Right place, Right time
  - Right cost
  - Right condition

Pharmaceutical supply…

Drug supply management at HFs involves the following basic functions:

- Selection
- Quantification
- Procurement
- Storage and distribution
- Use

Pharmaceutical supply…

Selection

- HFs pharmacy should have DTC approved list of medicines, medical supplies, equipment and laboratory reagents categorized into VEN

- The pharmaceutical supply mgt unit in consultation with the various departments in the HF selects the required medicines for procurement as per the approved list

Pharmaceutical supply...

Quantification

- The pharmaceutical supply management unit should collect relevant data from HMIS and other relevant sources of information which are essential for forecasting and supply planning

- Data to be collected from these sources include: Consumption, morbidity, demographic, services data, stock on hand, expiration date of products in stock etc

Pharmaceutical supply …

Procurement

- The pharmaceutical supply management unit prepares specifications for the selected pharmaceuticals to be procured
- Whenever necessary, the respective departments such as laboratory prepare specification in consultation with the unit
- Then, it assess the appropriate procurement options and calculate the budget requirements based on the results of quantifications and considering all the necessary expenses

Pharmaceutical supply…

- As per the public procurement policy of the country and the proclamation of Ethiopian pharmaceutical supply agency (EPSA),
  - The pharmaceutical supply management unit procures the required pharmaceuticals and also asses its performance
- All HFs should procure preferentially through EPSA and the payment can be made on credit/cash based on the signed agreement between EPSA/EPSA hubs and the HF

Pharmaceutical supply...

Storage and distribution

- The procured pharmaceuticals will be received by the pharmaceutical store manager of the hospital
- Before receiving pharmaceuticals, the store manager shall assure their type, quality, usability and quantity
- Store manager should receive the pharmaceuticals using Model 19, and give signed and sealed copy of confirmation for the deliverer using appropriate invoices

Pharmaceutical supply…

- Up on issuing, the dispensing/service delivery unit should fill Internal Facility Report and Resupply Form (IFRR) and the store manager should issue using model 22

- The distribution of pharmaceuticals should always be based on first expire first out (FEFO) principle

Pharmaceutical supply…

Use

- Medication use play vital role in the health care delivery since it is the core intervention in treating patients

- Medication use involves a multistep process including prescribing, transcribing and documenting, dispensing, administering, and monitoring

Pharmaceutical supply…

- Through all these process, patients should receive medications:
  - Appropriate to their clinical needs
  - In doses that meet their own individual requirements
  - For an adequate period of time, and
  - At the lowest cost to them and their community

Pharmaceutical supply…

Inventory control systems

- The purpose of an inventory control system is to maintain appropriate stock levels to meet the needs of patients
- A well designed inventory control system informs personnel when and how much of a commodity to order and helps to reduce shortages, oversupply, and expiry of commodities
- To do so, both manual and computer based inventory management system can be implemented

Summary

- Definitions
- DTC
- Facility specific pharmaceutical lists
- Pharmaceuticals supply mgt

Reading assignment

- Standardized forms for inventory management of pharmaceuticals and their functions
- Good dispensing practice

References

- Ethiopian Hospital Services Transformation Guideline. 2016
- Health service management lecture note