



Wholesale Pharmacy

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ABSTRACT

It is very important to know the layout of pharmacy for student apprentice pharmacist. The knowledge of proper arrangement of things in the pharmacy, during the training period, someone will not get problem for arrangement to be done in his own pharmacy. Student pharmacist who wants to be registered pharmacist must know the drugs and cosmetic Act 1940. The drug and cosmetics Act was passed in 1940, with a main object to regulate the import, manufacture distribution and sale of drug and cosmetics. The Act also provides for the control over the sale and distribution of drugs by only trained and qualified persons. In retail pharmacy now-a-days readymade formulation of drugs are available student pharmacist knows the different dosage forms of drug but in training he got opportunity to handle, feel and see the different dosage forms at one place i.e. in retail pharmacy. A trained pharmacist must know the drug formulations available in market but with that someone must know the pharmacological action of the particular drug.

Wholesaling or distributing is the sale of goods or merchandise to retailers; to industrial, commercial, institutional or other professional business users; or to other wholesalers and related subordinated services. In general, it is the sale of goods in bulk to anyone, either a person or an organization, other than the end consumer of that merchandise. Wholesaling is buying goods in bulk quantity, usually directly from the manufacture or source, at a discounted rate. The retailer then sells the goods to the end consumer at a higher price making a profit.

Keywords:

Merchandise, Pharmacological, Organization, Import, Readymade formulation, Subordinated.

INTRODUCTION

The function of pharmaceutical wholesalers is to act as an intermediary between the pharmaceutical industry and their customers (e.g., hospital and community pharmacies) by purchasing and distributing medicines to their customers. With regard to patient safety they must guarantee that the quality of the products is kept through the whole distribution line and that the influx of counterfeited drugs is avoided. To meet this demand, wholesalers have developed sophisticated distribution logistics. Recent experience from counterfeit cases demonstrated that the wholesalers may play an important role in protecting the drug market from counterfeited medicines.

The wholesaling pharmacy industries (Distributive trades sector) represent the intermediate steps in the distribution of

merchandise between producers and consumers of goods. Wholesale and retail trade services are crucial to the efficient and effective flow of goods from producer to consumer. Together the wholesaling and retailing industries account for significant portions of economic output and global employment. Wholesalers act as marketing intermediaries that neither produce nor consume the finished product, but instead sell to retailers, other merchants, and/or to industrial, institutional, and commercial users.

Wholesalers frequently physically assemble, sort, and grade goods in large lots, break-bulk, repack, and redistribute in smaller lots. While wholesalers of most products usually operate from independent premises, wholesale marketing for foodstuffs can take place at specific wholesale markets where all traders are congregated^[6]

GENERAL VIEW ON PHARMACEUTICAL DISTRIBUTION

LAYOUT OF WHOLESALE PHARMACY

FIGURE 02

A good layout results in comfort, convenience, appearance, safety and profits. Plant or shop pharmacy layout means "It identically involves the allocation of space and the arrangement of equipment's and stock of medicines in such a manner that overall operating costs or investments costs are minimized". Layout of pharmacy broadly means the arrangement and location of different furniture, medicines etc. within the available space. More important is how the owner is utilized the space to arrange the things. The decision regarding pharmacy layout cannot be taken once for all at the time of locating things. It should be flexible enough to accommodate the subsequent changes in the market trends and requirement of pharmacy and thus business objective can be achieved satisfactorily. Layout is a plan for arranging the physical facilities and manpower and utilizing them in an effective manner. Layout of retail pharmacy as shown in fig. 1 It is very important to know the layout of pharmacy for student apprentice pharmacist. With this trainee pharmacist can get the idea about storage of medicines and as well as display of it. Trainee pharmacist can get idea about proper utilization of space and thus achieves the objective of minimum movement of both medicine him / her. If trainee pharmacist got the knowledge of proper arrangement of things in the pharmacy, during the training period, trainee pharmacist will not get problem for arrangement to be done in his own pharmacy^[1].

Objective: -**1. Optimum utilization of man, materials and space.**

To minimize the selling expenses by handling the drugs/medicines efficiently. 3.Minimize the delays in dispensing by providing convenient service centers.

To provide optimum space for reserve stock office and visiting place foremployees.

To provide efficient supervision and dispensing control and reduce to changesq theft.

To minimize the movements of customers within the premises.

7.To attract the large number of customers.

TERMINOLOGY**Distribution:**

The procuring, purchasing, holding, storing, selling, supplying ,importing exporting, or movement of pharmaceutical products, with the exception of the dispensing or providing pharmaceutical products directly to a patient or his or her agent

Batch:

A defined quantity of pharmaceutical products processed in a single process orseries of processes so that it is expected to be homogeneous.

Batch Number:

A distinctive combination of numbers and/or letters which uniquely identifies abatch, for example, on the labels, its batch records and corresponding certificates of analysis.

Consignment :

The quantity of pharmaceutical products supplied at one time in response to a particular request or order. A consignment may comprise one or more packages or containers and may include pharmaceutical products belonging to more thanone batch.

Expiry Date :

The date given on the individual container (usually on the label) of a pharmaceutical product up to and including the date on which the product is expected to remain within specifications, if stored correctly. It is established foreach batch by adding the shelf life to the date of manufacture.

First expiry/first out (FEFO)

A distribution procedure that ensures that the stock with the earliest expiry dateis distributed and/or used before an identical stock item with a later expiry dateis distributed and/or used.^[9]

LOCATING PRODUCT ONTO THEIR LABELLED PRODUCT

Pharmaceutical labeling refers to the process of adding labels to pharmaceutical products to facilitate identification and understanding of important informationfor end users. There are four major types of labels that companies, and small businesses are using for their products and operations:

Brand labels:

This label includes information about the product's brand and its Parent brand. It conveys the brand name, trademark, logo, brand message, etc.

Descriptive Label:

This label includes product-related information like ingredients, usage information, care, performance, etc.

Grade labels:

Marketing Essentials Chapter 31, Section

The responsibilities of pharmacist while dispensing a prescription Ensuring that the supply of medicines is within the law. ensuring that the medicines prescribed to patients are suitable. advising patients about medicines, including how to take them, what reactions may occur and answering patients'questions.

The handling procedure of prescription are as follows.

Receiving.

Reading and checking.

Collecting and weighing the materials.

Compounding, packaging and labelling.

The process of dispensing is as follows;

Step One: Receive and Validate. As soon as you receive the prescription,you need to validate it. ...

Step Two: Understanding the Prescription.

Step Three: Label and Prepare the Medication.

Step Four: Final Check

Step Five: Record Your Work.

Step Six: Delivery and Patient Consultation.

The Dispensing of medicine

Dispensing includes preparing and giving medication for a client to take later, taking steps to ensure the pharmaceutical and therapeutic suitability of the medication for its intended use, and taking steps to ensure its proper use.

The procedure for dispensing

Ensure that the prescription has the name and signature of the prescriber.Ensurethat the prescription is dated and has the name of the patient. Avoid dispensing without a prescription or from an unauthorized prescriber. Check the name of the prescribed drug against that of the container.

Dispensing of proprietary medication

The meaning of proprietary medicine: Proprietary drug are chemicals used medicinal purposes which are formulated or manufactured under a name protected from competition through trademark or patent.

The process of dispensing are as follow:

Step One: Receive and Validate. As soon as you receive the prescription ,you needto validate it.

Step Two: Understanding the Prescription. Step Three: Label and Prepare the Medication. Step Four: Final Check.

Step Five: Record Your Work.

Step Six: Delivery and Patient Consultation.

The proprietary formulation:

A proprietary ingredient is a formulation, such as a flavour or fragrance, made with a mixture of ingredients. Sometimes details of these formulations are not in the public domain. Ingredient suppliers notify us of their proprietary ingredient formulations, which are entered in the TGA Proprietary Ingredient Tables^[6]

SORTING AND REVIEW OF INVOICE**Bill Invoice Processing are as follows:**

The word Invoice. Seller's name and address, contact details and company registration number. Buyers name and address. Date: invoice issue date, payment due date, delivery date. A unique invoice reference number. Review all the details of the invoice to make sure they're accurate. Look over the products or services provided and make sure they align with the agreement in the purchase order or contract. Look at the amount you're being charged and make sure it's in line with what you discussed with the supplier. The invoice review and approval process ensures that the invoice is in order, and the project is on track with the planned scope, schedule and cost. When the invoice has been reviewed and certified (approved), it is forwarded to accounting for payment processing. The Invoice Analysis report provides a listing of invoices billed to clients summarized by invoices (all types including WIP or Miscellaneous invoices), for the period, while the Billing Analysis report provides only a listing of billed time and expenses summarized by staff, work code or client for the period.

Here are the steps for invoice processing:

Capture, general ledger (GL) code, and match supporting documents such as a purchase order and/or delivery receipt

Send invoices to authorized approvers to approve or reject invoices.

Authorize and submit invoices for payment in a financial system.^[2]

LIST OF VENDORS(COMPINIES)**Medicines-****Sun pharma**

Coldact ,painamol ,brustan ,budez ,100 nasal spray etc.

Cipla

Okacet 10 , montecip lc, azicip 500, ceston cold,

fluka 150, ketocipshampoo etc.

Alkem

Digesta syrup, enzofalm, omeo etc.

Zydus cadila

Zyrup , lizovax, linid, linkit600, glucond, everyouth, complan, nycip, nutralite etc.

Lupin

Ab flo n ,ab flo sr, acemiz mr, acemiz plus, caltop syrup, clopitab75, doxcef 100 etc.

Teva

Acyclovir ointment, acyclovir suspension, amoxycilin tablet, baclofen, 3d gel, levera tab, gabapin nt 100, lipicure, ABD plus, cloba 1g, diva od, ceftas 200, vertin 16 etc.

Emcure

Asomex d, dinir tablet, liftaz1.0, metpure xl, orfor xt tab and suspension etc.

Glenmark pharmaceuticals

Candid dusting Powder, candid B cream, candid medicated soap etc.

Dr reddy's

Peccef 100, clamp, omez etc.

Surgical**Nulife**

Gloves, surgical gloves etc.

Aculife

Ns, Rl, Dns , Flmigrip etc.

Dispo van

2 ml ,5 ml, 10ml syringe And needles.

Figure No .03

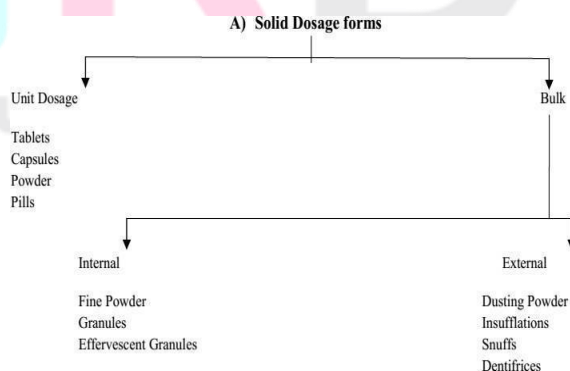


Figure No .04

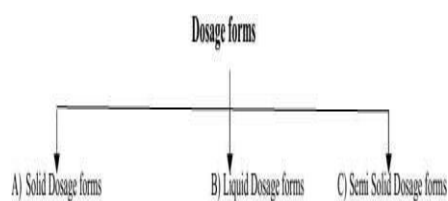
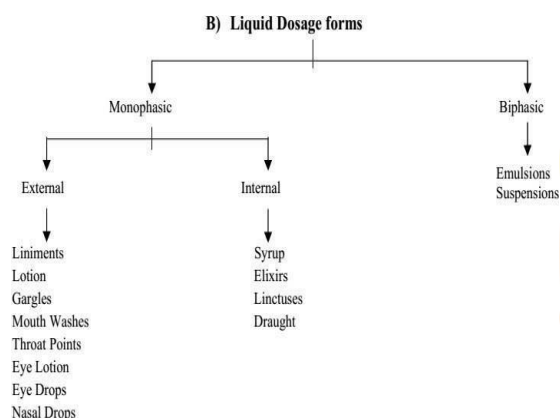


Figure No.06



REVIEW OF PURCHASE ORDER (PO)

The Purpose of a Purchase Order: A purchase order is a legal agreement that protects both the buyer and the seller. Once accepted by the vendor, a purchase order becomes a legally binding contract. If there is not an existing contract that governs the relationship between buyer and seller, the purchase order can be used in place of a contract. This offers legal protection for both buyer and seller.

The purchase order review are as follows: A purchase order, or PO, is an official document issued by a buyer committing to pay the seller for the sale of specific products or services to be delivered in the future.

The types of purchase order:

Standard purchase order (PO): The standard purchase order is the type most of us are familiar with

Planned purchase order (PPO)

Blanket purchase order (BPO)

Contract purchase orders (CPO)^[8]

SORTING AND EXPIRED MEDICINE

The procedure to sort out expired drugs available in pharmacy:

Waste immobilization this method the products are removed from the package like removing pills from blister.

The products are then ground and made a paste with a mixture of water, cement and lime. Then they are taken to landfill and decanted into normal urban waste.

Expired medical products can be less effective or risky due to a change in chemical composition or a decrease in strength. Certain expired medications are at risk of bacterial growth and sub-potent antibiotics can fail to treat infections, leading to more serious illnesses and antibiotic resistance.

Dispose of expired medicines in India:

Disposing medicines in the household trash Prescription and over-the-counter (OTC) drugs in pills, liquids, drops, patches, creams and inhalers can be thrown into the household trash.

Your best bet is to open the cans or bottles, pour the contents into the compost bin, clean the containers, and put them in the recycling bin. You never want to toss unopened cans of expired food items into the bin

Landfill: The waste materials are directly placed into a land disposal site without prior preparation or treatment. This is the oldest and most practiced method for solid waste disposal. Untreated waste must be rapidly covered with other municipal waste to prevent scavenging. Care should also be taken to prevent contamination of ground water. **Waste immobilization (encapsulation):** Expired drugs are immobilized in a solid block within a plastic or steel drum. After filling these substances into the drum to about 75 per cent of the capacity, the drum is filled with a mixture of lime, cement and water in appropriate proportion. The sealed drums may be placed at the base of the landfill and covered.

Waste immobilization (initiation): In this method the products are removed from the package like removing pills from blister. The products are then ground and made a paste with a mixture of water, cement and lime. Then they are taken to landfill and decanted into normal.

Sewer: Some liquid medicines like syrups, intravenous fluids can be flushed into sewer after dilution. Small quantities of liquid medicines including antiseptics can be disposed of if they are well diluted before flushing.

Burning in open containers: Burning of medicines in open containers at low temperature cause release of toxic pollutants to the environment. Though not a preferred method, small quantities.

Incineration: Medium and high temperature incineration devices require a capital investment, operation and maintenance budget. Medium temperature incinerators

operate at a medium temperature combustible process (800-1000°C) while high temperature incineration works at a temperature above 1000°C. Incineration of expired medicines. Chemical decomposition: As the method is tedious and time consuming, it is useful only for small quantities of medicines when appropriate incineration method is not available. Before disposal, the expired medicines are required to be sorted out to different categories that require different disposal method or based

on dosage forms. Based on dosage forms they may be classified into three basic categories: Solids, semi solids and powders; liquids and aerosols canisters. controlled substances like narcotics and psychotropic substances; anti- infective drugs; antineoplastics antiseptics and disinfectants etc^[2].

DISPENSING OF MEDICINES IN PHARMACY

Dispensing includes preparing and giving medication for a client to take later, taking steps to ensure the pharmaceutical and therapeutic suitability of the medication for its intended use, and taking steps to ensure its proper use. Nurses dispense with or without the involvement of a pharmacist. The steps of dispensing of medicine Step One: Receive and Validate. As soon as you receive the order, you need to validate it. Step Two: Understanding the Order. Step Three: Label and Prepare the Medication Step Four: Final Check. Step Five: Record Your Work. Step Six: Delivery. Dispensing systems deliver precise amounts of liquid in the nanoliter, microliter, and milliliter range into a microplate or tube. They are used in drug discovery, genomics and proteomics, materials science, forensics, and foodsafety^[4].

Telecommunication with other distributors for products comparison and market status

They preserve electronic medical records more efficiently and permanently in databases, and are accessible anytime. They improve communication among health professionals and patients. Telecommunication is the most competitive and fastest growing market in the globe. Dynamic competition in telecom is produced by battle among companies to produce more reliable or more economical commodities. The telecommunications sector consists of three basic sub-sectors: telecom equipment (the largest), telecom services (next largest), and wireless communication. The major segments within these sub-sectors include the following: Wireless communications. Communications equipment. It Satisfies Our Basic Needs. Information technology and the ability to connect and communicate is a fundamental part of how our society operates. In today's digital ecosystem, telecommunication has become the foundation for businesses, governments, communities, and families to seamlessly connect and share information Data is transmitted in a telecommunications circuit by means of an electrical signal called the carrier or the carrier wave. In order for a carrier to convey information, some form of modulation is required. The mode of modulation can be categorized broadly as analog or digital.

REVIEW OF STOCK DOSAGE FORM:

Drugs are used for diagnosis, mitigation, treatment, cure or prevention of disease in human being. Drugs are rarely administered in different dosage forms after converting them into suitable formulation. In retail pharmacy now-a-days readymade formulation of drugs are available student pharmacist knows the different dosage forms of drug but in

training he got opportunity to handle, feel and see the different dosage forms at one place i.e. in retail pharmacy. Student pharmacist must initially recall and understand the different dosage forms and how they are administered. Because in some retail pharmacies the medicines are kept in shelves according to dosage forms. capsules, tablets, syrups, Creams, injections etc. Hence before starting the training trainee pharmacist must collect different dosage forms meaning and their administration or application so that trainee pharmacist can give information to the patient about administration, storage condition etc. Dosage forms may be classified on the basis of physical form the final product^[10].

Table No .01

Unit dosage

Tablet

Tablet is a unit pharmaceutical dosage form. It comprises a mixture of active substances and excipients, usually in powder form, pressed or compacted from a powder into a solid dose

Capsule

Techniques used to enclose medicines in a relatively stable shell known as a capsule.

Powder

A powder is a dry, bulk solid composed of a large number of very fine particles that may flow freely when shaken or tilted.

Pills

A pill was originally defined as a small, round, solid pharmaceutical oral dosage form of medication that was in use before the advent of tablets and capsules.

Granules

A granule is a dosage form consisting of powder particles that have been aggregated to form a larger mass, usually 2–4 mm in diameter.

Effervescent Granules

Effervescent granules are uncoated granules generally containing acid substances and carbonates or hydrogen carbonates which react rapidly in the presence of water to release carbon dioxide.

Powder A dusting powder is a finely divided insoluble powder containing ingredients such as talc, zinc oxide, or starch.

Insufflations

It is the practice of inhaling a substance. Insufflation has

medical use as a route of administration for many respiratory drugs used to treat conditions in the lungs (e.g., asthma or emphysema) and paranasal sinus (e.g., allergy).

Snuffs

Snuff (tobacco), fine-ground tobacco, intended for consumption by being inhaled or sniffed into the nose.

Dentifrices

Dentifrices are agents used along with a toothbrush to clean and polish natural teeth.

LIQUID DOSAGE FORMS

Monophasic dosage forms

Internal dosage forms

a.Syrup

A syrup is a thick, viscous liquid consisting primarily of a solution of sugar in water, containing a large amount of dissolved sugars but showing little tendency to deposit crystals.

Elixirs

It is a clear, sweet-flavoured liquid used for medicinal purposes, to be taken orally and intended to cure one's ills. When used as a pharmaceutical preparation, an elixir contains at least one active ingredient designed to be taken orally.

Linctuses

A syrupy or sticky preparation containing medicaments exerting a local action on the mucous membrane of the throat.

Draught

These are liquid oral preparations of which only one or two rather large doses of the order of 50 ml are prescribed.

External dosage forms

Liniments

Liniment (or embrocation), from the Latin linere, to anoint, is a medicated topical preparation for application to the skin. Sometimes it called balms.

Lotion

The term "lotion" has been used to categorize many topical suspensions, solutions and emulsions intended for application to the skin.

Gargles

Gargling is where the head is tilted back, allowing the mouthwash to sit in the back of the mouth while exhaling, causing the liquid to bubble.

Nasal Drops

Nasal drops are solutions of drugs that are instilled into the nose with a dropper. They are usually aqueous because oily drops inhibit movement of cilia in nasal mucosa and if used for long periods, may reach the lungs and cause lipoidal pneumonia.

Mouth Washes

It is a liquid which is held in the mouth passively or swilled around the mouth by contraction of the perioral muscles and/or movement of the head, and may be gargled, where the head is tilted back and the liquid bubbled at the back of the mouth.

Eye Lotion

Eye-lotions are usually weak solutions in water of one or more medicaments of an antiseptic, astringent, or sedative character- such as boric acid, mercuric chloride, alum, tannic acid, borax, or sodium bicarbonate.

Eye Drops

Eye drops are saline-containing drops used as an ocular route to administer.

Throat Points

Throat paints are more viscous due to high content of glycerin which being sticky adheres to the affected site and prolong the action of the medicament

A Pharmaceutical suspension is a coarse dispersion in which internal phase is dispersed uniformly throughout the external phase.

Emulsions

An emulsion is a system consisting of two immiscible liquid phases, one of which is dispersed throughout the other in the form of fine droplets; droplet diameter generally ranges from 0.1–100 μm .

An ointment is a greasy, semi-solid preparation that contains dissolved or dispersed drug.

Pastes

Pastes are semisolid dosage forms that contain one or more drug substances intended for topical application.

Creams

A cream is a semi-solid emulsion formulated for application to the skin or mucous membranes. Droplet diameter in topical emulsions generally ranges from 0.1–100 μm .

Jellies

Jellies are transparent, non-greasy, semisolid preparation for external applications to skin & mucous membrane.

Suppositories

A suppository is a drug delivery system that is inserted into the rectum (rectal suppository), vagina (vaginal suppository) or urethra (urethral suppository), where it dissolves or melts and is absorbed into the blood stream

WHOLESALE & RETAIL DRUG LICENSE APPLICATION FORMAT^[6]

FIGUR

FUTURE SCOPE

Physical stores will not only be a powerful media channel, but also the most manageable and measurable media channel in financial terms. The future of retail will see complete integration of technologies like augmented and virtual reality, the internet of things, sensor-driven packaging and connected appliances. This will result in an exponential impact on e-commerce volumes. They'll be exploring a range of new platforms, systems, shipping capabilities and technologies to dramatically improve consumer confidence in buying these categories online. The whole concept of how we shop online will also change dramatically. In the future, all but the most convenience-based retailers will begin to use their stores as media to acquire customers and their media platforms as stores to transact sales. Put another way, media is now a cost of sales and rent is now a cost of customer acquisition. Online merchants can display more products, provide more accurate and robust product information, and transact seamlessly in one click. Media is not merely becoming the store, it's becoming the ultimate store. Physical stores are going through a very different but corresponding evolution. Brick-and-mortar stores are no longer simply a channel for the distribution of products. They no longer act as the final point in the purchase funnel. Physical stores are becoming a powerful media channel, and very often the first point of contact between brands and consumers. As consumers become increasingly technologically entrenched, they'll crave far more and better physical retail experiences. A relationship that can then live across multiple buying channels.

CONCLUSION

To do the practical training in a Wholesale pharmacy is nothing but utilizing and implementing whatever knowledge gained during course. Every student trainee should do systemic training during practical training period. This proforma will be beneficial to all institutes of pharmacy for uniformity in project and training before sanctioning the apprentice practical training. The Project as a whole describes the scope and viability of the trading industry and mainly of financial, technical and its market potential. The project guarantees sufficient fund to repay the loan and also give a good return on capital investment when analyzing the social economic impact this project is able to generate and employment of five and above. It will cater the demand of and trading and thus helps the other business entities to increase the production and service which provide service and support to this industry. Thus more cyclic employment and livelihood generation. So in all ways, we can conclude the

project is technically and socially viable and commercially sound too

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