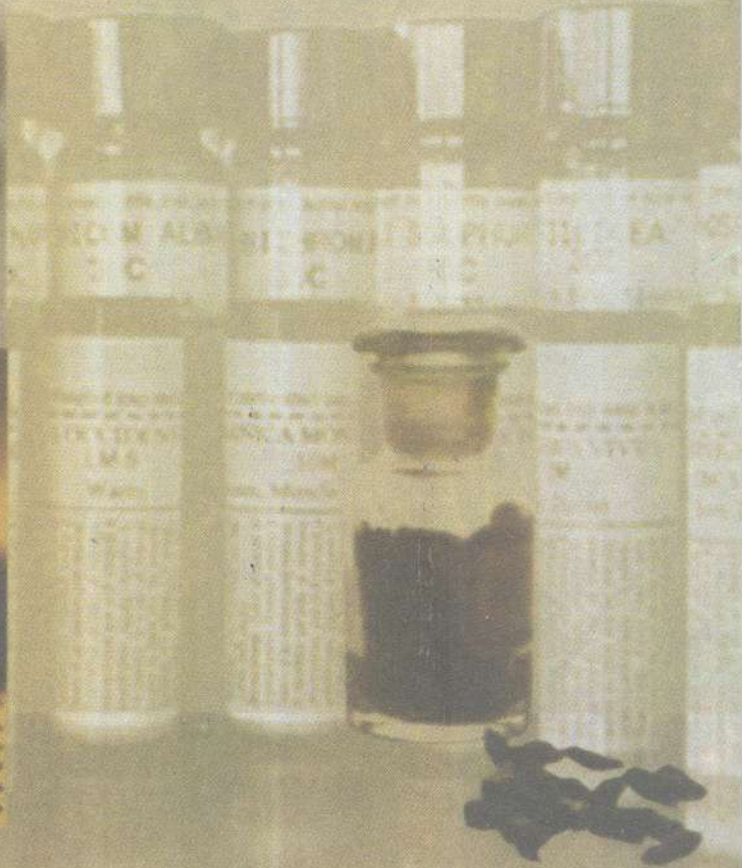


Open Vocational Education Programme

Certificate in **HOMEOPATHIC DISPENSING**

719

Module 2: Introduction to Homeopathic Dispensing



NATIONAL INSTITUTE OF OPEN SCHOOLING

**Certificate
in
Homeopathic Dispensing**

**Module 2:
Introduction to Homeopathic Dispensing**

*Course Coordinator
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Assistant Director*



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On behalf on NIOS, I wish you the very best for a bright and successful future.

*(M.C Pant)
Chairman*

Module 2 :
Introduction to Homeopathic Dispensing

CONTENT

SR.NO.	LESSON NAME	PAGE NO.
1.	PHARMACY, HOMEOPATHIC PHARMACY, PHARMACOPOEIA	1
2.	SOURCES, COLLECTION AND PRESERVATION OF DRUG SUBSTANCES	11
3.	HOMEOPATHIC DISPENSARY	20
4.	PREPARATION OF HOMEOPATHIC MEDICINE	29
5.	HOMEOPATHIC POSOLOGY	49
6.	LIST OF ESSENTIAL DRUGS WITH ABBREVIATIONS	53
7.	STUDY OF PRESCRIPTION AND ABBREVIATIONS USED IN PRESCRIPTION	63
8.	DRUGS AND COSMETIC ACTS MEDICINAL AND TOILET PREPARATION ACT	69
9.	DUTIES AND RESPONSIBILITIES OF A DISPENSER	77

Module 2 :
Introduction to Homeopathic Dispensing

1

PHARMACY, HOMEOPATHIC PHARMACY, PHARMACOPOEIA

1.1 INTRODUCTION

Pharmacy forms a very important part of any system of medicine. Good health is all because of development in the field of medicine and pharmacy. As earlier pharmacy is no more just a part of medicine but a distinct discipline of its own and the progress in this field has made the survival of mankind a less tasking process.

Dr. Hahnemann has greatly contributed in the field of medicine with the discovery of homeopathy and homeopathic pharmacy, which comprises the essence of homeopathy.

Proper knowledge of pharmacy and homeopathic pharmacy is essential for understanding the preparation and dispensing of homeopathic medicines by a homeopathic dispensary.

1.2 OBJECTIVES

After reading this chapter you will be able to understand

- Meaning of Pharmacy and Homeopathic Pharmacy
- History of Pharmacy and Homeopathic Pharmacy
- Meaning of Pharmacopoeia
- Homeopathic Pharmacopoeia of India.

1. Pharmacy

Definition

It is an art and science of collecting, combining, preserving, preparing and standardizing drugs and medicines derived from natural and synthetic sources. It also includes compounding and dispensing of medicines.

The word '*Pharmacy*' also means the place where medicines are made and distributed.

Collecting

Definition

It means to gather the required drug material. All the drug materials are not available at all places at all the time. So they have to be collected or gathered from different areas of a country or from different countries.

e.g Tarentula cubensis (a homeopathic medicine) is prepared from Cuban spider, which is found in Cuba and Mexico

Combining

Definition

It means joining two or more things together

Preserving

Definition

It means keeping the drugs and medicinal preparations in proper conditions so that they don't lose their medicinal properties or specific nature.

Eg. Mother tinctures should be stored in new, well cleansed, colourless, neutral flint glass bottles in dry cool place.

Homeopathic medicines should be kept in cool dry place away from too cold or hot conditions as it damages the medicinal properties of the medicine.

Preparing

Definition

It means preparing medicines from essential raw material under suitable conditions. These suitable conditions are given in detail in subsequent chapters.

Standardizing

Definition

Drugs and medicines so prepared are made to conform some standards, prescribed by 'Appropriate authority'. This method is known as standardizing

Compounding

Definition

It means uniting two or more different elements or constituents together so as to form an altogether new product which will have new properties different from those of its constituents.

e.g. Magnesium phos is a compound of magnesium and phosphorus.

Dispensing

Definition

It means preparing and serving the medicinal preparation in proper form say in powder or in liquid form according to nature of the drug and also direction of a qualified registered doctor.

History Of Pharmacy

The history of pharmacy and medicine go way back to the ancient times as the development of medicine marks the development of pharmacy.

There is no separate documentary evidence in respect of Historical Development of Pharmacology.

History of pharmacy begins with the period when disease was considered as a displeasure of God and the priest was considered as the magical man treating these diseased bodies with some folk medicines. Since then a lot has been discovered and invented in pharmacy. The discovery of various systems of medicine with their own system of pharmacy in ancient times, like Sumerian and Oriental medicine, ancient Hindu medicine (better known as Ayurveda) Mohammedan and Jews medicines, Greek and Roman medicines all contributed greatly in the advancement of Pharmacology.

Different systems of medicine were discovered during the early times of medicine e.g. Unani , Chinese, Homeopathy and various other systems all over the world.

It was by the end of 19th century that the need for Pharmacology was realised and many experiments were carried out in laboratories. Then the era of modern Pharmacology began.

IN-TEXT QUESTIONS 1.1

Fill in the blanks in the following:

1. The word 'pharmacy' implies the place where medicines are _____ and _____.
2. Dispensing means _____ and _____ of medicinal preparations.

Mark the following statements as True or False

1. Preserving means preparing the medicine from essential raw material.
2. Pharmacy is an art and science of collecting and preparing medicines derived from natural and synthetic sources.
3. Compounding means uniting two or more different elements so as to form a new product.

3. Homeopathic Pharmacy

Definition

Homeopathic pharmacy is an art and science of collecting,

compounding combining, preparing, preserving and standardizing drugs and medicine from mineral, vegetable, animal kingdoms and certain physiological and morbid substances according to Homeopathic principles given in Organon Of Medicine (It is a discipline in homeopathy which comprises of the various principles and laws of homeopathy)

It also includes dispensing medicines and remedies according to the prescription of homeopathic physician.

Homeopathic pharmacy includes:

Collection

Definition

It means collection or gathering of drug materials from various parts of the world.

e.g. Exotic plants are to be imported from various countries around the world.

Identification And Quality Inspection

Definition

Identification of various substances belonging to various kingdoms (plant, animal, mineral, chemical etc) required to make homeopathic drugs and thereafter their quality assessment by suitable instruments and chemicals are a must before using them for preparation of medicines.

Preservation

Definition

Drug material and medicines so prepared should be well preserved so as to maintain their healing powers.

e.g. Various drugs must be kept only at room temperature and in neutral glass bottles away from sunlight so as to avoid diminishing of their medicinal powers.

Standardization

Definition

This should be done according to the guidelines provided by the appropriate authority and official Homeopathic Pharmacopoeia.

Combination

Definition

It means uniting two or more different elements together so as to form an altogether new product. This new product will have new properties different from those of its constituents.

Eg: Natrum mur has sodium and chloride

Magnesium phos has magnesium and phosphorus.

Preparation

Definition

It includes preparation of mother tinctures (Concentrated form of any drug), dilutions (drug substance combined with distilled water, or alcohol), triturations (after the concentrated form are further diluted to enhance the drug power of the drug) and also conversion of triturations into liquid form (certain drugs are made in solid form and some in liquid form)

Dispensing

Definition

It means preparing and serving medicinal preparations in proper form (powder, liquid, globules etc.) according to the directions given by qualified registered doctor.

4. History Of Homeopathic Pharmacy

The beginning of homeopathic pharmacy is from day, which marks the discovery of homeopathy. The uniqueness of homeopathic pharmacy lies in extracting the latent curative powers of the substances, which are otherwise inert in their crude form.

Dr. Friedrich Christian Samuel Hahnemann, the founder of homeopathic system of medicine carried out various experiments between the year 1790-1810, which brought into light the medicinal powers of many such substances, which were believed to have no medicinal powers.

Dr. Hahnemann has mentioned basic principles of homeopathic pharmacology in practical part of his '*Organon Of Medicine*' (comprises various principles of homeopathy) under different aphorisms and in his book on 'Chronic Diseases'. He had also given different, advice and directions on homeopathic pharmacology in his book "*Materia Medica Pura*" (it is the detailed account of various homeopathic drugs written by Dr. Hahnemann himself)

IN-TEXT QUESTIONS 1.2

Fill in the blanks in the following.

1. Homeopathic pharmacy is an _____ and _____ of _____, _____, _____, _____ and _____ drugs & medicines from different sources.
2. Preparation in homeopathic pharmacy means preparation of _____, _____ and _____.
3. Basic principles of homeopathic pharmacology are given in _____ and _____.

Mark the following statements as True or False.

1. Dr. Samuel Hahnemann was the founder of homeopathic system of medicine.
2. The uniqueness of homeopathic pharmacy lies in arousing the latent curative powers of medicinally inert substances.

5. Pharmacopoeia

Definition

The term 'pharmacopoeia' originates from two Greek words '*pharmakon*' means a drug and '*poieo*' means to make.

It is a book that provides the guidelines for the preparation, combining, compounding and standardization of various drugs and medicines. It also contains a list of many drugs and medicines with information about their sources, habitats and description. It is published officially by an 'Authority' i.e by the Government –in-charge of medical or pharmaceutical society, either constituted by or authorized by the Government. Different countries have different pharmacopoeias ,various pharmacopoeias today available are-

- German Homeopathic Pharmacopoeia,
- British Homeopathic Pharmacopoeia,
- Homeopathic Pharmacopoeia Of United States Of America (U.S.A)
- Homeopathic Pharmacopoeia Of India

6. Homeopathic Pharmacopoeia Of India

Indian government accepted homeopathy after the homeopathic enquiry commission report in 1948,since then it has published 6 volumes of homeopathic pharmacopoeia compiled by 'Homeopathic Pharmacopoeia Committee' appointed in September 1962 by the Central Government

Homeopathic pharmacopoeia committee is constituted with following objectives:

1. To prepare pharmacopoeia of homeopathic drugs whose therapeutic usefulness have been proved on the lines of American, German And British Homeopathic Pharmacopoeia;
 2. To lay down principles and standards for preparation of homeopathic drugs;
 3. To lay down tests to identify and to check quality and purity of drugs;
 4. Such other matters as are incidental and necessary for preparation of homeopathic pharmacopoeia.
-

IN-TEXT QUESTIONS 1.3

Fill in the blanks in the following.

1. Pharmakon means a _____.
 2. Poieo means _____.
 3. Homeopathic pharmacopoeia committee was appointed in _____.
 4. Till now _____ volumes of Homeopathic Pharmacopoeia have been published by the central government.
-

SUMMARY

In this chapter we have learnt various aspects of pharmacy and specifically homeopathic pharmacy, which includes collecting, combining, preserving, preparing, standardizing, compounding and dispensing.

Pharmacy is part of medicine since ancient times, which include Sumerian, Oriental, Hindu, Mohammedan, Jews, Greek and Roman medicines and today it is a science of its own. Homeopathic pharmacy was discovered by Dr. Friedrich Christian Samuel Hahnemann during his various experiments in the years 1790-1810. He discovered that various substances which were earlier inert acquire medicinal properties when subject to processes which arouse their latent power.

Finally, we have learnt about pharmacopoeia with special reference to Indian Homeopathic Pharmacopoeia. In 1962 homeopathic pharmacopoeia committee was appointed with various objectives.

TERMINAL QUESTIONS

1. What do you mean by pharmacy?
 2. What is the meaning of dispensing?
 3. What do you mean by pharmacopoeia?
 4. What are the objectives of homeopathic pharmacopoeia committee of India?
 5. What do you mean by compounding?
-
-

ANSWERS TO IN-TEXT QUESTIONS

IN-TEXT QUESTIONS 1.1

Fill in the blanks

1. Made, distributed
2. Preparing, serving

True or false

1. False
2. False
3. True

IN-TEXT QUESTIONS 1.2

Fill in the blanks

1. Art, science, collecting, compounding, combining, preparing, preserving, standardizing
2. Mother tinctures, dilutions, triturations.
3. Organon of medicine, chronic diseases.

True or false

1. True
2. True

IN-TEXT QUESTIONS 1.3

Fill in the blanks

1. A drug
 2. To make
 3. September 1962
 4. Six
-

2

SOURCES, COLLECTION AND PRESERVATION OF DRUG SUBSTANCES

2.1 INTRODUCTION

Homeopathic medicines are prepared from different sources taken from animal, vegetable and mineral kingdom and also from healthy and unhealthy secretions of the body. Thus a proper study of various sources from which these medicines are prepared is important. A homeopathic dispenser dealing with the homeopathic medicines should have sound knowledge of these sources.

This chapter tells us in details the various sources used for making homeopathic medicines with examples.

2.2 OBJECTIVES

After reading this chapter you will be able to know and understand :

- Various sources from which Homeopathic medicines are prepared;
 - About vegetable kingdom;
-

- Medicines prepared from vegetable kingdom;
- About Animal kingdom;
- Various medicines prepared from animal kingdom;
- About mineral kingdom
- Various medicines prepared from mineral kingdom

1. Meaning of Sarcodes

2. Meaning of Nosodes

3. Meaning of Imponderabilia

1. Sources of Homeopathic Drugs

1.1. Vegetable kingdom

It includes various plants (whole plants and their parts like leaves, roots, seeds, stem, bark & flowers etc.). It also includes fungi, weeds and mushrooms.

Examples –

- i) Whole plant including root – e.g. *Acalypha indica*, *Aconitum napellus*, *Arnica montana*, *Belladonna*, *Chamomilla* etc.
 - ii) Whole plant without roots – e.g. *Alfalfa*, *Lobelia inflata*, *Ocimum sanctum* etc.
 - iii) Roots – e.g. *Bryonia alba*, *Rauvolfia serpentina*, *Artemisia vulgaris*, *Arum triphyllum*, *Ipecacuanha* etc.
 - iv) Stem – e.g. *Sabina*, *Rhus venenata*
 - v) Modified stem (Rhizome) – e.g. *Helleborus niger*, *Hydrastis*, *Cimicifuga racemosa*, *Dioscorea villosa*, *Gelsemium* etc.
 - vi) Bulb – e.g. *Allium cepa*, *Allium sativum*, *Colchicum autumnale* etc.
-

-
- vii) Tuber – e.g. *Solanum tuberosum aegrotans* (diseased potato)
- viii) Bark – e.g. *Cinchona officinalis*, *Jonosia asoka*, *Cascara sgarada*, *Azadirachta indica*
- ix) Bark (inner) – e.g. *Cinnamomum*, *Prunus virginiana*
- x) Bark of root – e.g. *Baptisia tinctoria*, *Berberis vulgaris*, *Granatum*, *Hamemelis virginica* etc.
- xi) Bark of root (Inner) – e.g. *Gossypium herbaceum*
- xii) Leaves – e.g. *Abrotanum*, *Cannabis indica*, *Coca*, *Digitalis purpurea*, *Kalmia latifolia*, *Thuja occidentalis*, *Rhus toxicodendron*, *Tabacum* etc.
- xiii) Flowering heads – e.g. *Cina* etc.
- xiv) Spores – e.g. *Lycopodium clavatum* etc.
- xv) (1) Fruits (Berries) – e.g. *Agnus castus*, *Crategus oxycantha* etc.
- (2) Nuts – e.g. *Aesculus hippocastanum*, *Aesculus glabra* etc.
- (3) Fruits (semimature) – e.g. *Capsicum*, *Colocynthis* etc.
- (4) Bean – e.g. *Ignatia amara*
- xvi) Seeds – e.g. *Avena Sativa*, *Carduves marianus*, *Cocculus indica*, *Coffea*, *Nux vomica*, *Sabadilla* etc.
- xvii) Herb – e.g. *Ledum palustre*, *Verbascum thapsus* etc.
- xviii) Weed – e.g. *Fucus vesiculosus* etc.
-

- xix) Fungii – e.g. Agaricus muscarius, Bovista etc.
- xx) Juice – e.g.
 - (i) Aloe socotrina (from leaves),
Anacardium orientale (from seeds),
Opium etc.
 - (ii) Latex e.g. Euphorbium
 - (iii) Extracts e.g. Curare
 - Oils e.g. Croton tiglium, Oleum ricini etc.

B. Animal kingdom

Drugs of Animal kingdom imply drugs, which are derived from animals in general, or their secretions or products, including different types of worms, lice, insects, flies, crabs, toads, and snakes. Animals as a whole, any of their body parts or secretions, milk; saliva, poisons etc. are used in preparation of drugs.

- a) Whole animals – e.g. Apis mellifica (Honey bee),
Asterias rubens (Star fish), Blatta orientalis (Indian cockroach),
Medusa (Alive jelly fish), Theridion (Orange spider), Formica (Red ant.)
etc.
 - b) Whole animals (Dried) – e.g. Cantharis (Spanish fly), Coccus cacti.
 - c) Different parts, secretions etc. of animals
 - Skeletons – Spongia tosta
 - Shells – Calcareo carb
 - Juice – Sepia (inky juice of cuttle fish),
Mephitis, Murex
-

- Milk and milk products – e.g. Lac caninum(Dog's milk),
Lac defloratum (skimmed cow's milk), Lac felinum (cat's milk), Lac vaccinum (cow's milk) etc.
- Venoms of poisonous animals – e.g. Crotalus horridus, Lachesis, Vipera betus etc.

IN-TEXT QUESTIONS 2.1

1. Fill in the blanks in the following:
 - A) Two medicines prepared from whole plant including roots _____ and _____.
 - B) Two medicines prepared from stem are _____ and _____.
2. Mark the following True or False.
 - A) Allium cepa is prepared from roots of a plant.
 - B) Cantharis is prepared from whole animal dried.
 - C) Apis mellifica is prepared from Honeybee.

C Mineral kingdom

Metals used e.g. Aluminium, Argentum metallicum (silver),
Aurum metallicum(Gold), Ferrum (Iron), Zinum (Zinc)

Non metals used e.g.- Bromine, Chlorine, Iodine,
Phosphorus, Sulphur etc.

Minerals e.g. Graphites, Hecla lava, Mica, Silica,•
Anthracite etc.

Organic acids e.g. Acetic acid, Benzoic acid, Oxalic acid,
Carbolic acid, Formic acid etc.

Inorganic acids e.g. Nitric acid, Muriatic acid,

Phosphoric acid, Sulphuric acid etc.

Salts e.g. Ammonium carb, Natrum Carb, Natrum mur,
Kali brom, Kali carb, etc.

Mineral oils e.g. Kerosene, Paraffin, and Petroleum etc.

D. Sarcodes

Definition

'Sarcodes' in Greek means 'fleshy'. This group includes medicines, which are prepared from healthy secretions of human beings and lower animals. These healthy secretions include mainly secretions by the endocrine glands.

Endocrine glands secrete hormones directly into the blood, which are carried to all parts of the body where they regulate many metabolic functions of the organism.

Examples -

- i) Thyroidinum - prepared from the thyroid gland of sheep or calf
- ii) Pituitarum posterium - prepared from the posterior portion of Pituitary gland of sheep.
- iii) Cholesterinum - main constituent of gallstone and bile.
- iv) Insulin - a pancreatic hormone, that controls sugar metabolism in the body.
- v) Adrenaline - a hormone produced by the adrenal gland.

E. Nosodes

The term 'Nosode' is derived from two Greek words, 'Noses' means 'disease' and 'cidos' means **appearance**.

The medicines that are prepared from disease producing agents, diseased products or diseased parts of human beings, lower animals or plants are called **Nosodes**.

Examples –

1. From diseased product of plants – *Secale cornutum*, *Ustilago maydis* etc.
2. From diseased product of animals – *Anthracinum*, *Malandrinum*, *Lyssin*, *Ambra grisea* etc.
3. From diseased products of human beings – *Tuberculinum*, *Psorinum*, *Medorrhinum*, *Bacillinum*, *Syphilinum* etc.

F. Imponderabilia*Definition*

Imponderabilia means something which i.e. the substances which have no perceptible weights, they have immaterial power or energy. They can be natural or artificial.

Examples – *Natural*- *Luna* (full moon), *Sol* (Sun's ray),

Magnetis poli ambo (Magnet),

Magnetis polus Australias (South pole of Magnet),

Magnetis polus Arcticus (North pole of Magnet),

Radium. Artificial - *Magnetis artificialis*, *X-Ray*, *Electricitus*.

These natural and artificial agents are also used beneficially in homeopathic system of medicine.

IN-TEXT QUESTIONS 2.2

1. Fill in the blanks in the following sentences.

- a) 'Sarcodes' in Greek means _____.
- b) Endocrine glands secrete _____.
- c) *Imponderabilia* means which is not _____.

2. Mark the following True or False.

- a) *Tuberculinum* and *Psorinum* are prepared from diseased products of plants.
-

- b) Sarcodes means medicines prepared from the healthy secretions of human beings and lower animals.
 - c) Imponderabilia sources can be natural as well as artificial.
-

SUMMARY

In this chapter you have learnt about various sources of homeopathic drugs with examples. From vegetable kingdom which included drugs made from whole plants and various parts of the plants i.e leaves, roots, bark, fruits, seeds, stem, bulb, tuber, buds, nuts, herbs, weed, spores, fungi, juice, extracts from plants and various oils.

Drugs made from Animal kingdom include drugs made from whole animal e.g. star fish, jelly fish and various others. Some of these animals are dried and then utilised to form homeopathic medicine.

Various secretions from animals are used to make homeopathic drugs e.g. inky juice from cuttle fish used to make Sepia, Lac Caninum is made from dog's milk, poisonous venoms of snakes are used eg. Vipera betus and various other secretions are used to make homeopathic drugs.

Mineral kingdom includes various metals, non-metals, organic/inorganic acids, various salts/mineral oils etc.

Sarcodes are the secretions from healthy human beings and lower animals mainly from their endocrine glands Thyroidinum, Pituitarum posterium etc are some examples of medicines prepared from sarcodes.

Nosodes are the disease producing agents or products e.g. Lyssin made from saliva of a rabid dog, Tuberculum is made from tuberculus lung of human being and various other such secretions are used to make homeopathic medicines.

TERMINAL QUESTIONS

1. Give the names of two metals and non-metals used for making Homeopathic drugs.
-

2. Explain, in brief, the meaning of Nosodes. Give two examples of Nosodes.
3. Give three examples of sacrodes.
4. What do you mean by 'Imponderabilia'?
5. Give two examples each of medicines prepared from –
 - a) Diseased product from plants
 - b) Diseased product from lower animals
 - c) Diseased product from human beings.

ANSWERS TO IN-TEXT QUESTIONS

IN-TEXT QUESTIONS 2.1

1.
 - a) Aconite napellus, Chamomilla or any other two.
 - b) Sabina and Rhus venenata
2.
 - a) False
 - b) True
 - c) True

IN-TEXT QUESTIONS 2.2

1.
 - a) Fleshy
 - b) Hormones
 - c) Weighable
 2.
 - a) False
 - b) True
 - c) True
-

3

HOMEOPATHIC DISPENSARY

3.1 INTRODUCTION

In the early days of homeopathy, the physicians used to prepare their own medicines. Now it is essential to have a properly trained homeopathic dispenser to do the same. This is therefore essential that they are well trained about the various aspects of a homeopathic dispensary.

Homeopathic dispensary is a place where the medicines are stored and later dispensed. A dispenser should have proper knowledge about the commonly used apparatus, instruments, and utensils, how to keep the vicinity clean and maintenance of the homeopathic dispensary.

3.2 OBJECTIVES

In this chapter you will study about.

- Homeopathic dispensary in ideal conditions
 - Commonly used apparatus in a homeopathic dispensary
 - Weights and measures used in a homeopathic dispensary
 - Maintaining a homeopathic dispensary.
-

3.3.1 An Ideal Homeopathic Dispensary

A homeopathic dispensary can only be ideal when the surroundings, room, furniture, utensils and apparatus used are kept clean and in good condition.

3.3.2 Surroundings

It is essential that a Homeopathic dispensary should be away from an open sewage, public lavatory, insanitary surroundings, factories producing smoke, dust and any kind of obnoxious fumes or gas.

Clean and pollution free environment is very essential to keep the homeopathic medicines intact.

3.3.3 Room

A homeopathic dispensary should be well ventilated and spacious where there be sufficient exhaust arrangements. As room temperature has much influence on the homeopathic medicines, thus presence of too much cold or heat deteriorates the potentiality of homeopathic medicines.

Absence of strong direct sunlight, dampness or darkness should be the ideal conditions in the room. It should be perfectly dry and clean and be free from any kind of dust, smoke or strong odour as presence of them destroys the medicines especially the potentised medicines.

3.3.4 Furniture And Equipments.

In a homeopathic dispensary the furniture used should be made of seasoned wood; it should be well polished, clean and well cared. Preferably all the tabletops should be made of sun-mica or marble.

IN-TEXT QUESTIONS 3.1

Fill in the Blanks in the following:

1. An ideal homeopathic dispensary should be free from _____.
 2. Too much of _____ and _____ deteriorates the potential of a Homeopathic drug.
 3. The furniture in a homeopathic dispensary should be made of _____ and should be _____.
-

Write whether the following statements are True or False.

1. Homeopathic medicines should be made in polluting environment _____
 2. Homeopathic medicines should be kept in a room which is dry and clean and free from any kind of dust, smoke or strong odour as their presence destroys the medicines especially the potentised medicines _____
 3. Strong direct sunlight, dampness, darkness has no effect on the properties of homeopathic medicines _____
-

3.3.2 Commonly Used Apparatus In A Homeopathic Dispensary

1. Balances

Types

1. Physical Balance Or Weighing Platform Balance.

Uses

weighs larger quantities where finer accuracy is not required.

2. Brass –pan balance

Uses

Used for serving prescription i.e. compounding purpose.

3. Glass – pans scale

Uses

Used for substances which absorb moisture known as Hygroscopics and also used for substances, which corrode called as Caustics.

4. Horn – pans scale

Uses

Used for weighing sugar of milk and poisonous substances.

5. Single – pans scale

Uses

Putting the substance in one pan and adjusting the knob so as to read the weight directly on the scale.

6. Chemical balance.

Uses

These balances are used during chemical analysis for accurate weighing.

7. Open two- pan balance

Uses

These kinds of balances are used when large amounts of substances are to be weighed without high degree of accuracy.

8. Analytical balance

Uses

Used for weighing 20-200g of substance accurately i.e. when great accuracy is required.

9. Dispensary balance

Uses

Used for weighing up to 50g of drug substances with accuracy.

2. Containers, Bottles, Glasses.

In a homeopathic dispensary all containers, bottles, glasses should be colourless and made of neutral flint glass. If any other material is used, it may affect the medicinal properties of the drug.

All substances that have a tendency to get easily decomposed or liable to be affected by direct sunlight for those substances yellow or amber colored bottles or phials are used.

3. Glass Stopped Bottles

Substances those are liable to corrode the cork but which do not corrode glasses. e.g. Acids, Chlorine, Bromine, Iodine preparations, Chloroform, etc. in their 1X or 2X (potencies are the further dilutions of the concentrated forms of the drug which are called mother tinctures which

are discussed in detail in further chapters) of the potencies.

Stoppers of these bottles should be made of hard glass, which prevents even fine glass particles from entering into the drug substances due friction of the bottles, mouth and the stoppers.

They are used to store mother tinctures and potentised medicines.

4. Corks

Corks are used to close the mouth of the bottle and make it airtight

They should be of velvet quality, which is the best to be used, free from any cuts or pores. Any cork once used should not be used for any other bottle containing other drugs as it may contain some medicinal properties of the previous drug.

Corks when get soft and shrink should be discarded.

5. Mortars And Pestles

Mortar and pestle should be made of porcelain and the inside of the mortar and the pestle should be ground or unglazed. Whereas in large-scale manufacturing concern for pulverizing very hard substances highly polished iron mortars and pestles, are used.

Uses

For pulverizing (it is the process of grinding) hard substances or for making solid potencies.

e.g. Nux Vomica in a nut; To make it into powder form mortar and pestle is used.

For mercurial preparation different mortar and pestle must be used.

For Stannum preparation also different mortar and pestle must be used.

Mortar and pestle should be washed with solvent like Nitric Acid followed by distilled water repeatedly after using it for mercurial preparation.

3.3.3 SPATULAS AND SPOONS

Spatulas and spoons should be made of horn, bone, ivory, porcelain or stainless steel.

Uses

- (i) Preparing Triturations, Ointments, Biochemic preparations, tablet, globules etc.
- (ii) Measuring and handling different powders

IN-TEXT QUESTIONS 3.2

Match the following

1. Analytical balance	1. weighing upto 50gm
2. Bottles and glass	2. stoppers
3. Yellow and amber glass	3. weighing upto 20-200gm
4. Dispensary balance	4. colourless neutral flint material
5. Hard glass.	5. substances which decompose in sunlight.

4. Weights and Measures.

1. Weight

Definition:

It is defined as the measure of the respective gravitational force acting upon particular body, which is directly proportional to its mass content. Variation in temperature, pressure, altitude and latitude have effect on weight and which are to be considered where precise weighing is required.

2. Measure

Definition:

It is defined as the means of determining the volume or extent a particular body occupies, which varies appreciably with the rise and fall of temperature especially in cases of gas and liquid.

3. Metric System

3. Metric System

A decimal system of weight and measures eg. Kilogram, gram, milligram is legal and internationally accepted

Below are given some useful conversions used in a homoeopathic dispensary.

TABLE

House hold measures	Metric equivalent
1 teaspoonful	4 ml
1 desert spoonful	8 ml
1 table spoonful	15 ml
1 wine glassful	60 ml
1 tea cupful	120 ml
1 tumblerful	240 ml

4. Maintenance Of A Homoeopathic Dispensary

A homoeopathic dispensary with all the required necessities should be well maintained for its proper functioning.

The following should be considered.

- All surroundings should be clean and room should be well ventilated
- Furniture should be well polished and kept tidy.
- All the apparatus should be kept clean
- All glass utensils should be well washed and cleaned after using.
- All bottles and containers should be kept in clean place and well labeled
- Corks and stoppers should be of good quality.
- All measuring apparatus should be regularly checked and should be devoid of any errors.

Fill in the blanks in the following:

1. Weight varies with _____ & _____
 2. Measure varies with _____.
 3. 1 tablespoonful is equal to _____ ml.
-

SUMMARY

In the above chapter we have studied the concept of ideal homeopathic dispensary; the proper surroundings it should have, kind of room and furniture required for a proper functioning of the dispensary.

In a homeopathic dispensary various apparatus and utensils are used. Above we have learnt about the commonly used glass bottles, balances, containers, mortar & pestle, spatula and spoon what are their uses and what should be done to keep them intact. Finally we have discussed the maintenance of homeopathic dispensary.

TERMINAL QUESTIONS

1. Describe in brief the requirements of an ideal homeopathic dispensary?
 2. What are the commonly used utensils in a homeopathic dispensary? Write a short note on each.
-

ANSWERS TO INTEXT QUESTIONS**IN-TEXT ANSWERS 3.1****Fill in blanks in the following.**

1. Sewage, Dust, Smoke, Obnoxious Fumes, Gases.
2. Heat, cold.
3. Season wood, polished, clean

True and false ,

1. False

2. True

3. False

IN-TEXT ANSWERS 3.2

Match the following

1. 3

2. 4

3. 5

4. 1

5. 2

IN-TEXT ANSWERS 3.3

Fill in the blanks

1. Pressure, Latitude, Altitude, Temperature

2. Temperature

3. 15ml.

4

PREPARATION OF HOMEOPATHIC MEDICINE

4.1 INTRODUCTION

Every homeopathic physician should be thoroughly convinced that the patient takes the correct medicine, which is only possible when the medicines are prepared in unadulterated form called as genuine medicine.

A homeopathic dispenser should be well aware about the preparation of these genuine medicines and must be able to judge their genuineness himself.

4.2 OBJECTIVES

In this Chapter you will be able to know the following

- Preparation of mother tinctures, powders, solution of various drug substances and its methods
 - Different scales used to prepare homeopathic medicines
 - Vehicles and their properties, used to dispense the homeopathic medicines
 - Different external applications used in homeopathic prescribing
-

4.3 PREPARATION OF MOTHER TINCTURE, MOTHER SOLUTIONS AND TRITURATIONS

This can be done by either the Old Method or the New Method. The differences are as follows:-

Old	New
1. Introduced by Master Hahnemann.	1. Introduced by American & British pharmacopoeia
2. The old method recommend nine different classes to prepare various mother tinctures, solutions and triturations.	2. In new method there is no such classes.
3. Old method classified substance of the plant in four classes eg. (i) most juicy, (ii) moderate juicy, (iii) less juicy, (iv) dry plant & animal drugs	3. No such Classification in New method.
4. Old method uses different methods for preparation of mother tincture from vegetable & animal kingdom e.g. Class I – plant juices to be used. For Class II – the plant substance mixed with alcohol & then strained	4. In new method there are only two methods; (i) Maceration (ii) Percolation
5. Drug power varies in different classes of drug substance in old method eg: Class I & II : ½ Class III : 1/6 Class IV, V (A), VI (A) : 1/10 Class V (B), VI (B) : 1/100	5. In new method a standard drug power of 1/10 is maintained in all drug substances with few exceptions. e.g. Ambra grisea & Ars album having DP of 1/100 depending on their low solubility.
6. It prepares drugs under two scales (i) Decimal Scale (ii) Centesimal scale	6. It uses only decimal scale.

Old Method

Dr. Hahemann had classified drug substances into nine classes in his old method.

- 1) Class – I – Tinctures are prepared with equal parts by weight of drug juice and alcohol

Drug power: $\frac{1}{2}$

Examples: Aconitum napellus, Asarum europeum, Causticum

- 2) Class – II – Tinctures prepared by adding two parts of strong alcohol by weight to three parts of plant juice by weight.

Drug power: $\frac{1}{2}$

Example: Euphrasia, Mezereum, Vinca minor

- 3) Class – III – Mother Tinctures prepared with two parts by weight of alcohol to one part of plant.

Drug Power: $\frac{1}{6}$

Examples: Abrotanum, Aethusa cynapium, Pulsatilla

- 4) Class- IV – Tincture is prepared with 5 parts by weight of strong alcohol to one part by weight of pulp or powder of drug substance.

Drug Power: $\frac{1}{10}$

Examples: Asafoetida, Sabadilla

- 5) Class- V (A) – Mother tincture is prepared by taking one part by weight of the medicinal substance and dissolving it in 9 parts by weight of purified water.

Drug Power: $\frac{1}{10}$

Examples: Ammonium carbonicum, Natrum muriaticum

Class-V (B) – Tincture is prepared by taking one part by weight of the medicinal substance and dissolving it in 99 parts by weight of purified water

Drug Power: $\frac{1}{100}$

Example: Antimonium tartaricum,

Acidum phosphoricum, Platinum muriaticum

- 6) Class-VI (A) – Tincture is prepared by taking 1 part, by weight, of the drug substance and dissolving it in 9 parts, by weight, of alcohol

Drug Power: 1/10

Examples: Abies nigra, Camphor, Acidum, carbolicum

Class – VI (B) – Mother tincture is prepared by taking one part, by weight, of the medicinal substance and dissolving it in ninety – nine parts by weight of alcohol

Drug Power: 1/100

Examples: Iodum, Kreosotum, Petroleum

- 7) Class – VII: This class include dry medicinal substances which are neither soluble in purified water nor in alcohol, in their crude state.

Centesimal scale –

1 part by weight of the medicinal substance to 99 parts by weight of sugar of milk gives 1st trituration

Following triturations are prepared with one grain of the preceding trituration to 99 grains of sugar of milk.

This trituration is converted into liquid potencies by taking one grain of the 3rd trituration dissolved in 50 minims of purified water and mixed with 50 minims of alcohol which gives the 4th potency.

The subsequent potencies and prepared by taking one minims of the preceding potency to ninety-nine minims of alcohol.

Decimal Scale:

One part by weight of the medicinal substance to 9 parts by weight of sugar of milk gives 1 x trituration.

Potencies are prepared by taking one grain of preceding potency (trituration) subsequent to nine grains of sugar of milk.

Conversion to liquid potency:

The liquid potency is made by taking one grain of 6 x trituration dissolved in 50 minims of purified water and mixed with 50 minims of alcohol gives

8 x potency subsequent potencies are prepared by taking one minim of the preceding potency to ninety nine minims of alcohol.

Examples: Baryta carb, Carbo veg, Mag phos

8) Class VIII

Centesimal Scale -

The class contains drug substances which are neither soluble in purified water nor in alcohol. 1 minim of the drug substance to 99 grains of sugar of milk gives the 1st trituration, followed by taking 1 minim of 1st trituration to 99 parts by weight of sugar of milk gives the 2nd trituration and this process is repeated to prepare the next potency.

Conversion into liquid potency: 1 grain of 3rd trituration is dissolved in 50 minims of purified water and mixed with 50 minims of alcohol-gives the 4th potency.

Decimal Scale:

1 minim of drug substance to 9 grains of sugar of milk gives the 1 x trituration. 1 part by weight of 1 x trituration with 9 parts by weight of sugar of milk gives the 2 x trituration. All subsequent triturations are made by taking one grain of preceding trituration to nine grain of sugar of milk.

Conversion to liquid potency:

1 grain of the 6x trituration dissolved in 50 minims of purified water and mixed with 50 minims of alcohol gives the 8x potency.

Examples: Lachesis, Lyssin, Naja tripudians

9) Class IX –

These substances are first pounded or grated to fine pulp then triturated and potentised.

Centesimal Scale

1 part by weight of the substance and 99 parts by weight of sugar of milk gives the 1st trituration followed by 1 part, by weight of the 1st trituration to 99 parts of by weight of sugar of milk gives the 2nd trituration

Conversion to liquid potency: One grain of 3rd trituration dissolved in 50 minims of purified water and mixed with 50 minims of alcohol gives the 4th potency.

1 minim of the 4th potency to 99 minims of alcohol gives the 5th potency
Further potencies are made in the same fashion

Decimal Scale:

2 parts, by weight of the substance and 9 parts, by weight, of sugar of milk gives the 1 x trituration.

1 part by weight, of the 1 x trituration to 9 parts, by weight of sugar of milk gives 2nd trituration; following triturations are made in the same manner.

Conversion to liquid potency: One grain of 6 x potency is dissolved in 50 minims of purified water and 50 minimum of alcohol to give 8 x potency.

1 minim of the 9X potency to 9 minims of dilute alcohol gives the 10X potency.

Examples: Anthracinum, Psorinum, Malandrinum

1.2 New Method

In the new method, with the exception of a few drugs the homeopathic pharmacopoeia of United States 1941 prescribes the uniform standard of 10% drug strength in most cases of medicinal preparations.

They maintain a standard drug power for all kinds of drug substances, that is drug power of 1/10 therefore the centesimal scale is eliminated. New method insists in using a drug substance as a whole instead of using the fresh juice of the succulent plants only.

MACERATION

Definition

This method is used to extract medicinal substances in large quantities, which require much time for the medicinal principles to be extracted from them.

In this method Various mucilaginous or gummy substances in which rapid

penetration of alcohol is not possible are immersed a prong alcohol for a definite period of time as per pharmacopoeia.

PERCOLATION

Definition

This method is used to extract medicinal substances from dried vegetable and animal substances.

The drug to be percolated are reduced to proper degree of fineness as given in the monograph of the drug in a Pharmacopoeia.

IN-TEXT QUESTIONS 4.1

Fill in the blanks in the following.

1. Hahnemann's old method used _____ and _____ scale for preparation of homeopathic medicines.
 2. Drug power of class I is _____.
 3. Drug power of class V(A) is _____ and V(B) is _____.
 4. Iodum and Kresotum belong _____ to class _____.
 5. Drug power of class VI(B) is _____.
-

4.3.2 Dynamization or Potentization:

2.1 Potentisation –

It is defined as a process by which medicinal properties, which are latent in natural substances while in their crude state becomes awakened and developed into activity to an incredible degree.

Potency – It is defined as the power, which is derived by the process of potentisation.

In other words, homeopathic potencies are the result of a series of successive reduction in concentration of the basic medicinal substance followed by vigorous agitation i.e. the dynamization.

Dilution - It is defined as act of mixing of one substance with the vehicle so as to diminish its action.

2.2 Scales of Potentisation :

For succussion-

- (i) **Decimal**
- (ii) **Centesimal**
- (iii) **50 Millesimal**

Where as for trituration only 2 scales are used.

- (i) **Decimal**
- (ii) **Centesimal**

Triturations can be converted to liquid potencies only after 6x potency. Triturations below this degree of fineness cannot be transformed into liquid state, as neither the alcohol nor the purified water will be able to dissolve them.

Decimal Scale :

Dr. Constantine Hering introduced decimal scale. Suffixing the letter 'X' i.e. first potency '1 X', second potency 2 X, denotes the potency.

In this scale the first potency should contain 1 /10th part of the original drug. The 2nd potency will contain 1/10th part of the 1st potency, and so on.

Centesimal Scale:

Centesimal scale was introduced by Dr. Hahnemann himself. It is denoted by suffixing the letter 'c' to number indicating the potency. In this scale the 1st potency should contain 1/100th part of the original drug and 2nd potency will contain 1/100 part of the 1st potency and so on.

50 Millesimal Scale -

50 Milliesimal scale was introduced 78 yers after Hahnemann's death. In this scale the 1st potency should contain 1/50,000th part of the original drug,

the 2nd potency will contain 1/50,000th part of the 1st potency and so on. The potency in 50 millesimal scale is denoted by I, II, V, X etc or 0/1, 0/2, 0/15 and so on.

2.3 PROCESSES OF POTENTIZATION

Potentization includes two processes.

- i) Trituration : this process is used for drug substance which are insoluble in liquid vehicles.
- ii) Succussion: this process is required to potentize drug substances which are soluble in liquid vehicles.

TRITURATION :

Decimal Scale Trituration:

This process involves triturating one part by weight of the crude drug with 9 parts, by weight, of sugar of milk.

Trituration is done in 3 main stages. The sugar of milk, by weight, is divided into 3 equal parts.

First stage: 1 part by weight of drug substance and one of the 3 parts of sugar of milk is taken in a mortar and thoroughly mixed with a spatula and then steadily triturated either in clockwise or anticlockwise direction for 6 minutes. Next scrape the medicine from the inner walls of the mortar & pestle for 3 minutes and finally mix and stir it for 1 min Thus taking 10 minutes in the whole process. This whole process of 10 minutes is repeated. Thus the first stage of trituration will be completed in 10+10=20 minutes.

Second stage: In second stage another part of sugar of milk is added to triturated mixture of first stage and the process of 20 minutes is again repeated.

Third stage: Similarly in the third stage the process is repeated by adding the remaining part of the sugar of milk to the mixture prepared in 2nd stage and another 20 minutes is taken for scraping, mixing and triturating.

Finally after 1 hr. (60 minutes) the whole process is completed and 1 x potency is prepared. Further to make 2 x potency, 1 part by weight of 1 x potency is

taken and 9 parts by weight of sugar of milk is equally divided into 3 parts and the 3 stage process is done for 1 hr. and thus 2 x potency is prepared e.g. Nat mur 2X, Silicea 2X etc.

Centesimal Scale of Trituration :

The process of trituration is same as in the decimal scale except that 1 part, by weight, of drug substance is triturated with 99 parts of sugar milk. The 3-stage process is done by dividing the sugar of milk into 3 parts and triturated similarly as for decimal scale for 1 hr. with each stage taking 20 minutes. Thus we get 1st potency i.e. 1C of the drug and the subsequent potencies are prepared by taking 1 part by weight of 1st potency with 99 parts of sugar of milk equally divided in 3 parts and then triturated under 3 stage process.

SUCCUSSION :

Drugs, which are soluble in water and alcohol, are prepared by succussion. The drug may be prepared in either water or alcohol or mixture of both.

Decimal scale

Succussion, in decimal scale, is done by taking one part of the mother tincture or solution to be potentised and 9 parts of rectified spirit in well cleaned round glass phial keeping 1/3 of the phial empty. Then ten downward strokes of equal strength are given. This is the 1X potency of the liquid drug. Further potencies are prepared by taking 1 part of preceding potency succussed with 9 parts of alcohol with 10 downward strokes.

Centesimal scale

Centesimal scale only differs from decimal in the portion of drug substances and alcohol taken. In centesimal 1 part of drug substance is succussed with 99 parts of alcohol (rectified spirit) and given 10 downward strokes to form 1C potency, further potencies are made by taking 1 part of preceding potency with 99 parts of alcohol then 10 downward strokes given to form the next potency.

3. Fluxion Or Jumping Potency

Dr. Hahnemann had directed that all metallic substances must be powdered and triturated till 6X or 3C triturations since the medicine is neither soluble in alcohol nor purified water upto these triturations.

Method:

In a 30 ml new phial take 0.2mg of the 6X or 3C trituration of the medicine; pour 10ml of purified water and shake it till the drug gets dissolved then add 10ml of dilute alcohol and give 10 downward strokes which should end in a jerk.

The potency prepared by this process is 8X called as jumping or fluxion potency.

IN-TEXT QUESTIONS 4.2**Fill in the blanks in the following:**

1. There are _____, _____ & _____ scales for potentisation .
2. Two types of potentisation are _____ and _____.
3. Trituration is used to potentise _____ drugs.
4. Succussion is used to potentise _____ drugs.
5. In Centesimal Scale 1 part of drug is taken with _____ part of sugar of milk/alcohol.
6. In Decimal Scale 1 part of drug is taken with _____ part of sugar of milk/ alcohol.
7. Duration for triturating a medicinal drug is _____.
8. _____ introduced decimal scale.
9. _____ introduced centesimal and 50 millesimal scale.
10. Jumping potency is made from _____ to _____.

4. Vehicles

In homeopathy vehicle is a substance in which medicines are prepared or mixed and given for their internal administration or external application.

4.1 Types Of Vehicles

- i) Solid
- ii) Liquid

General properties of a vehicle

1. It should not have any medicinal property of its own
2. It should be chemically neutral and should not decompose or change.
3. It should be harmless regarding its actions on human beings
4. It should be edible and palatable.

4.2 Solid Vehicles.

I. Sugar of milk

It is most important vehicle used in administration of homeopathic drugs because of its having no medicinal property of its own and because its hard crystalline nature helps to convey the medicinal property of the drug on the vehicle.

Properties

- Its chemical formula is $C_{12}H_{22}O_{11} \cdot H_2O$
- Molecular weight is 360.3
- Prepared from goat's milk, which contains protein, fats, carbohydrates, mineral salts and water.
- Odorless.
- Its solution is neutral to litmus.
- Faintly sweet.

Uses

1. Used in biochemic preparations
 2. Preparation of mother powders.
 3. Preparation of potentised medicines in decimal potency
 4. Preparation of potency of drugs insoluble in liquid vehicles
 5. Widely used for dispensing preparation.
-

Preservations.

It should be kept in dry place in airtight container or bottles.

II Globules and pilules

These are made from cane sugar and milk sugar

Properties

- They are round in shape
- Neither too hard nor too soft, soft when freshly prepared and get harder by age.
- Perfectly white in colour and odorless.
- Easily soluble in water but insoluble in alcohol.
- Sizes of globules vary from 10 to 40.

Uses

Dispensing various potencies of homeopathic medicines.

Measurement of globules

Globules are assorted according to their sizes eg. 10,15,20,30,40. They are measured by the millimeters required to cover the space, occupied by 10 equal sized globules placed in close contact with each other.

e.g. 10 equal sized globules are placed in a line in close contact they occupy 30mm space then 30 is the requisite number of those globules.

4.3 LIQUID VEHICLES.

Types

1. Distilled water
2. Alcohol
3. Glycerine
4. Vaseline or paraffin soft

1. Distilled water

Distilled water is physiologically inert and one of the most important vehicles in homeopathy.

Properties

- Chemical formula H_2O
- Molecular weight 18.
- Tasteless
- Odourless
- Colorless

Uses

1. Used in preparing mother solutions of drug substances, which are not soluble in alcohol.
2. Used in potentisation
3. Preparing some external applications. e.g. lotions.
4. Used in administration of medicines.
5. Used for final washing of utensils.

Preservation.

It should be preserved in well stoppered Pyrex glass bottles which should have been thoroughly cleaned.

2. Alcohol

It is one of the most important vehicles used in homeopathic dispensing.

Properties

- Chemical name – ethyl alcohol.
 - Chemical formula C_2H_5OH
 - Molecular Weight 46.07
-

- Prepared from various sources of starchy substances eg. potatoes, cereals, substances rich in sugar eg. Beet, Carrot, sugar cane etc. or synthetically prepared from hydrocarbon ethylene.
- Colorless, transparent, volatile liquid,
- Highly inflammable
- Mixes with water in all proportions.

Uses

1. Used in preparing mother tinctures of drug substances
2. Used to prevent all fermentation of plant juices.
3. Used in preparing dilutions and higher potencies of medicines.
4. Used in medicating globules.
5. It is a good solvent. Thus, it is used to prepare medicines from gums, resins and many volatile oils.
6. Also used as an antiseptic

Types

- a. Absolute alcohol

It is a type of alcohol containing 100% ethyl alcohol with no traces of water.

- b. Strong alcohol

It contains 95% by volume of pure alcohol and diluted with purified water.

- c. Dispensing alcohol

It contains 88% by volume or 83.1% by weight of ethyl alcohol and 12% by volume of water.

- d. Dilute alcohol

It contains 66% of ethyl alcohol.

3. Glycerine

Glycerine is a common constituent of various animal and vegetable oils and fats eg. coconut oil, olive oil.

Properties

- Chemical formula $\text{CH}_2\text{OH}.\text{CHOH}.\text{CH}_2\text{OH}$
- Molecular Weight 92.1
- It is clear, colorless and oily liquid
- Sweet in taste and mixes well with water and alcohol not with ether.
- It dissolves fixed alkalis, acids and large number of salts.

Uses

1. Used in medicines for its mild antiseptic property.
2. Used in preparing mullein oil.
3. Used to prepare glycerols for external applications.
4. Used to prepare mother tinctures and lower dilutions of certain poisonous products. e.g. Apis mel., Naja tripudians etc.

Preservation

It is preserved in a well tight clean neutral glass container.

4. Vaseline or paraffin soft

It is obtained from crude petroleum and are of two types: white and yellow.

White soft Paraffin-	Yellow soft Paraffin
Properties	Properties
<ul style="list-style-type: none"> ● White, translucent in colour ● Odourless ● Tasteless 	<ul style="list-style-type: none"> ● Pale yellow, translucent, soft mass ● Odourless when rubbed on skin ● Tasteless

Uses of both are the same

1. Used to make ointments
2. For dispensing medicines as external applications.

5. External applications

Homeopathy mainly advocates administration of medicines internally with symptom similarity.

The same medicine may only be used externally as lotion, liniment and ointment etc.

i) Lotions

They are liquid suspensions or dispersions in aqueous medium. For this preparation, one part of requisite mother tincture and 9 or 99 parts of purified water are mixed thoroughly.

A clean phial is taken and a proper amount of water is taken in the phial and then mother tincture is poured over it, then it is tightly corked and well shaken. This phial is then accurately labeled with the lines '*shake well before use*' and '*for external use only*' e.g. Calendula lotion.

ii) Glyceroles

They are the mixture of mother tincture in glycerine. Glyceroles are made by taking 1 part, by weight, or volume of required mother tincture or drug and 9 parts, by weight or volume of glycerine and mixed well e.g. Mullelin oil.

iii) Ointments

They are semi solid preparations used as external application.

It is prepared by taking 1 part, by weight, or volume of mother tincture and 9 parts, by weight, or volume of white soft paraffin and stored in airtight glass container in dark cool place.

eg. Boric acid, Graphities calendula.

iv) Liniments

These are spoken of as embrocations and are soapy or oily generally. For its preparation, one part of the required mother tincture is mixed with four parts of olive oil or with 'tincture of soap'. (H.P.I.) eg: Arnica liniment, Rhus tox liniment.

v) Mother Tinctures.

Mother tinctures for external use, if not specified, are diluted with equal parts of ethyl alcohol which was taken for its preparation as mother tincture. Otherwise different proportions of ethyl alcohol are used for different classes.

Class I and II: 1 part, by weight, of mother tincture and 1.5, by weight, of ethyl alcohol is taken, mixed well and stored.

CLASS III: 1.5 parts, by weight, of mother tincture and 1 part by weight of ethyl alcohol is taken and mixed well.

CLASS IV: 1 parts, by weight, of mother tincture and 1 part of ethyl alcohol, which was used for preparation of tincture, are mixed well.

After preparation they are kept in well-cleaned glass phial and correctly labelled.

IN-TEXT QUESTIONS 4.4

Write True or false against each sentence.

1. Lotions are made of glycerine.
2. Ointments are the mixture of mother tincture and white soft paraffin.
3. Calendula as an external application is used in form of lotion.

SUMMARY:

In the above chapter we have studied about the old and new methods of preparing mother tincture.

Then we discussed what is potentiation and what are the different scales of

potentisation ie decimal, centesimal and 50 milliesimal scale. We have learnt the various methods of potentisation, which are trituration and succussion to enhance the therapeutic power. After preparation of various potencies of the homeopathic drug for the purpose of dispensing we have studied many vehicles used to imprint the therapeutic power of medicine into them.

The administration of drug is done with the help of vehicles, which are inert and neutral in their properties and do not have any medicinal properties of their own. They are of two types : solid and liquid, which include sugar of milk, globules, distilled water, alcohol, glycerine and paraffin wax.

External applications are the medicinal dilution which are used to apply externally on the body they include lotions, glycerols, ointments, liniments and mother tincture.

TERMINAL QUESTIONS

1. What are the differences between the new and old method of preparation of mother tincture?
2. What are different scales of potentisation and two methods for preparation of potencies?
3. What are the various external applications used in-homeopathy? Describe them briefly?

ANSWERS TO IN-TEXT QUESTIONS

IN-TEXT ANSWERS 4.1

1. Decimal, Centesimal
2. $\frac{1}{2}$
3. 1/10, 1/100
4. VI(B)
5. 1/100

IN-TEXT ANSWERS 4.2

1. Decimal, Centesimal, 50 Millesimal
-

2. Trituration, Succussion
3. Insoluble
4. Soluble
5. 99
6. 9
7. 1 hr
8. Dr. Constantine Hering
9. Dr. Hahnemann
10. 6X, 8X

IN-TEXT ANSWERS 4.3

1. False
 2. True
 3. True
-

5

HOMEOPATHIC POSOLOGY

5.1 INTRODUCTION

The term posology originates from the Greek word 'posos' meaning how much and 'logos' meaning study or discourse.

Posology means the doctrine of doses of medicine. Stedman's Medical Dictionary states the meaning of dose as the quantity of a drug or other therapeutic agent to be taken or applied all at a time or in fractional amounts within a stated period.

A homeopathic dose includes potency, quantity, form and number of administration of the medicine.

5.2 DEFINITION

The study of the doctrine of doses of medicine is known as posology.

5.3 OBJECTIVES

After reading this lesson you will be able to

- Knowledge of posology helps to know the dose, medicine to be given to a patient. This knowledge is required for all branches of medical science
-

namely Allopathy, ayurveda, Unani and homeopathy etc. In homeopathy, knowledge of dose is very important because one single medicine is available and administered in various forms, viz., mother tincture, potency, biochemic tablets and trituration. In case of potency (potentized form) it is available in 6, 12, 30, 200, 500, 1M, 10M, 50M, CM and also in 50-millesimal. In case of biochemic tablets 3x, 6x, 12x, 30x and 200x are available. In case of trituration 1x, 2x, 3x, 6x etc. are available. The homeopathic dispenser must be well aware of preparation of dose of medicines which are to be administered to a patient.

5.4 BRIEF HISTORY OF HOMOEOPATHIC POSOLOGY

Discovery of homeopathy took place after taking the crude dose of Cinchona bark by Hahnemann himself.

Six years after the Cinchona experiment, i.e., in 1796, Hahnemann used to prescribe Arnica root in powder for dysentery. At that time his doses were - (i) for children of four years of age: at first 4 grains daily, then 7, 8 and 9 grains daily; (ii) for children of six to seven years, he started with 6 grains then gradually increasing the dose to 12 to 14 grains; (iii) for a child of 9 months, the doses were first 2 grains and then increased to 6 grains.

He prescribed three grains of Veratrum album every morning for 4 weeks in severe spasmodic asthma. In 1797, he prescribed 4 grains of Veratrum, once daily for colic. He also prescribed 5 grains of Ipecac, 4 grains of Nux vom and 1½ drachm of Cinchona bark in different cases.

Gradually Hahnemann diminished the quantity of doses in a method known as potentisation and came to the conclusion that doses must be smallest possible.

In an essay 'The Spirit of Homeopathic Doctrine' first published in 1813, he stated that the smallest dose is sufficient and that a greater one not necessary because the spiritual power of the medicinal dose not in this instance accomplish its object by means of quantity but by quality or dynamic fitness and a larger dose does not cure the disease better but leaves behind it a complex medicinal disease.

In 6th edition of Organon of Medicine, Hahnemann introduced 50millesimal scale of potency which is much more diluted and potentized form of homeo-

pathic medicine. Hahnemann ultimately came to the conclusion that minimum dose is required in homeopathy to cure a patient gently and smoothly. By minimum dose he means that amount of a medicine which though is in the smallest possible quantity yet is sufficient to produce a gentle remedial effect and the least possible excitation of the vital force to effect the necessary change in it. (§246 in Organon of Medicine - 5th edition).

In 6th edition of Organon of Medicine where Hahnemann has described the method of preparing and administering 50-millesimal potencies, the medicine can be frequently repeated without much fear of homeopathic aggravation as in such cases, the dose can be modified. But in cases of centesimal potencies, repetition should not be frequent. Rather, the physician is instructed to wait till the action of the medicine first administered, lasts. The reference of 50-millesimal potencies is given in 6th edition of Organon of Medicine in pages 246, 247, 248 including their footnotes.

APPROXIMATE DOSE OF HOMOEOPATHIC MEDICINE

Form	Adult (Above 14 years)	Child (3-14 years)	Infant (upto 2 years)
Globules	Four	Two	One
Powders	1 grain	½ grain	½ grain
Tablets	Four	Two	One
Mother tincture	10 drops	5 drops	2 drops
Potency (liquid)	1 drop	½ drop	1/4 drop

IN-TEXT QUESTIONS 5.1

1. What is meant by the term 'Posology'?
2. Why Hahnemann adopted smallest doses, though earlier he too prescribed medicine in large doses?
3. What is understood by the term 'Dose'?
4. In homeopathic mode of treatment minimum doses are used. Explain this 'minimum dose'.

5. Who introduced the 50-millesimal potencies? Where do we find its reference?

ANSWERS TO THE IN-TEXT QUESTIONS

1. The term 'posology' means the doctrine of doses of medicine. It has come from the Greek word 'Posos' which mean 'how much' and 'logos' which mean 'study'. So posology is the study of how much medicine is to be administered.
 2. Hahnemann adopted smallest doses gradually because he observed that the smallest dose is sufficient and that a greater one is not necessary as the spiritual power of the medicinal dose acts due to its quality and not due to its quantity. On the other hand, larger doses leaves behind it a complex medicinal disease. The 'modus operandi' of a homeopathic dose of a remedy is carried in the dynamic plane of the medicine.
 3. Dose is the quantity of a medicine administered to an individual at a time.
 4. Minimum dose means that amount of medicine which in its smallest possible quantity produces a gentle remedial effect and the least possible excitation of the vital force to effect the necessary changes in it.
 5. It was Master Hahnemann who introduced the concept of 50 millesimal potencies. Its reference is found in the 6th edition of Organon of Medicine mainly in 246, 247 and 248 including their footnotes.
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6

LIST OF ESSENTIAL DRUGS WITH ABBREVIATIONS

6.1 INTRODUCTION

Homeopathic Materia Medica is a subject, which deals with homeopathic medicines prescribed by a qualified homoeopath. A good dispenser should have a sound knowledge of the names of the essential medicines and their abbreviations used during prescription by a homeopathic physician.

6.2 OBJECTIVES

After reading this chapter you will be able to understand.

- Names of essential medicines used in prescriptions.
- Abbreviations used while prescribing homeopathic medicines by a homeopathic physician.

6.3 NAMES OF MEDICINES WITH THEIR ABBREVIATIONS

Latin names	Abbreviation
Abrotanum	Abrot.
Absinthium	Absin.

Acalypha indica	Acal.ind.
Aceticum acidum	Acet.ac
Aconitum napellus	Acon.nap.
Aesculus hippocastanum	Aesc.hip.
Agaricus muscarius	Agar.m.
Agnus castus	Agn.cast.
Allium cepa	All-cepa.
Allium sativum	All-sat.
Aloe socotrina	Alo.soc.
Alumina	Alum.
Ambra grisea	Ambr.
Ammonium carbonicum	Am-c.
Ammonium muriaticum	Am-m.
Ammonium phosphoricum	Am-p
Anacardium orientale	Anac.
Angustra vera	Ang.
Anthracinum	Anthr.
Antimonium crudum	Ant-cr.
Antimonium tartaricum	Ant-tart.
Apis mellifica	Apis.mel.
Apocynum cannabinum	Apoc.can.
Argentum metallicum	Arg-met.
Argentum nitricum	Arg-nit.
Arnica montana	Arn.mon.
Arsenicum album	Ars.alb
Aurum metallicum	Aur.met.

Avena sativa	Aven.sat.
Bacillum	Bac.
Badiaga	Bad.
Baptisia tinctoria	Bapt.
Baryta carbonica	Bar-carb.
Baryta muriatica	Bar-mur.
Belladonna	Bell.
Bellis perennis	Bel.per.
Benzoicum acidum	Benz-ac.
Berberis vulgaris	Berb.vulg.
Bismuthum	Bism.
Borax	Bor.
Bovista	Bov.
Bromium	Brom.
Bryonia alba	Bry.alb.
Bufo rana	Bufo.
Cactus grandiflorus	Cact.
Calcarea carbonica	Cal.carb
Calcarea fluorica	Cal-fl.
Calcarea phosphorica	Cal-phors.
Calendula officinalis	Calend.
Camphora officinalis	Camph.
Cannabis indica	Can-ind.
Cannabis sativa	Can-sat.
Cantharis	Canth.
Capsicum annuum	Caps.

Carbo animalis	Carbo.an.
Carbo vegetabilis	Carbo.veg.
Carcinosinum	Carc.
Carduus marianus	Card-mar.
Caulophyllum thalictroides	Caul.
Causticum	Caust.
Cedron	Cedr.
Chelidonium majus	Chel.maj.
Cinchona officinalis	Cinchona off.
Chininum arsenicosum	Chinin-ar.
Chininum sulphuricum	Chinin-s
Cicuta virosa	Cic.vir.
Cina	Cina.
Coca	Coca.
Cocculus indicus	Cocc.ind.
Coffea cruda	Coff.
Colchicum autumnale	Colch.
Colocynthis	Coloc.
Conium maculatum	Con.
Crotalus horridus	Crot-hor.
Croton tiglium	Crot-tig.
Cundurango	Cund.
Cuprum metallicum	Cup.met.
Digitalis purpurea	Dig.
Dioscorea villosa	Dios.
Diphtherium	Diph.

Drosera rotundifolia	Dros.
Dulcamara	Dulc.
Echinacea augustifolia	Echi.
Eupatorium perfoliatum	Eup-per.
Euphrasia officinalis	Euphr.
Ferrum metallicum	Fer.met.
Fluoricum acidum	Fl-ac.
Gelsemium sempervirens	Gels.
Glonoinum	Glon.
Graphites	Graph.
Guaiacum	Guaj.
Hamamelis virginica	Ham.
Helleborus niger	Hell.
Hepar sulphuris calcareum	Hep.sul.
Hipposzaenium	Hipposz.
Hydrastis canadensis	Hydr.
Hydrocotyle asiatica	Hydr.as.
Hyoscyamus niger	Hyos.
Ignatia amara	Ign.
Iodum	Iod.
Ipecacuanha	Ip.
Iris versicolor	Iris.ver.
Kalium bichromicum	Kali-bi.
Kalium bromatum	Kali-br.
Kalium carbonicum	Kali-carb.
Kalium cyanatum	Kali-cy.

Kalium muriaticum	Kali-mur.
Kalium sulphuricum	Kali-s.
Kalmia latifolia	Kalm.
Kreosotum	Kreos.
Lac caninum	Lac.c
Lac defloratum	Lac-d.
Lachesis mutans	Lach.
Lapis albus	Lap-a.
Ledum palustre	Led.
Lilium tigrinum	Lil-tig.
Lobelia inflata	Lob.
Lycopodium clavatum	Lyc.
Lyssinum	Lyss.
Magnesium carbonica	Mag-carb.
Magnesium phosphoricum	Mag-phos.
Medorrhium	Med.
Mercurius corrosivus	Merc-cor.
Mercurius solubilis	Merc.sol.
Mezereum	Mez.
Millefolium	Mill.
Murex purpurea	Murx.
Muriaticum acidum	Mur-ac.
Mygale lasiodora	Mygal.
Naja tripudians	Naja.
Natrum arsenicosum	Nat-ar.
Natrum carbonicum	Nat-carb.

Natrum muriaticum	Nat-mur.
Natrum phosphoricum	Nat-phos.
Natrum sulphuricum	Nat-sulph.
Nitricum acidum	Nit-ac.
Nux vomica	Nux.vom.
Nyctanthes arbortristis	Nyct.
Oleander	Olnd.
Opium	Op.
Petroleum	Petrol.
Phosphoricum acidum	Phos.ac.
Phosphorus	Phos.
Physostigma venenosum	Phys.
Phytolacca decandra	Phyt.
Platinum metallicum	Plat.
Plumbum metallicum	Plb.met.
Podophyllum peltatum	Podo.
Prunus spinosa	Prun.
Psorinum	Psor.
Pulsatilla nigricans	Puls.
Pyrogenium	Pyrog.
Ranunculus bulbosus	Ran-b.
Ratanhia peruviana	Rat.
Rhododendron chrysanthum	Rhod.
Rhus toxicodendron	Rhus-tox.
Robinia pseudacacia	Rob.
Rumex crispus	Rumx.

Ruta graveolens	Ruta.
Sabal serrulata	Sabal.
Sabina	Sabin.
Sanguinaria canadensis	Sang.c.
Secale cornutum	Sec.cor.
Selenium metallicum	Sel.
Senecio aureus	Senec.
Sepia officinalis	Sep.
Silicea	Sil.
Spigelia anthelmica	Spig.
Spongia tosta	Spong.
Stannum metallicum	Stan.met.
Staphysagria	Staph.
Stramonium	Stram.
Sulphur	Sulph.
Sulphuric acidum	Sul-ac.
Symphytum officinale	Symph.
Syphilinum Syphitinum	Syph.
Tabacum	Tab.
Tarentula cubensis	Tarent-c.
Tarentula hispanica	Tarent.his.
Tellurium metallicum	Tell.
Terebinthinae Terelinthina	Ter.
Teucrium scorodonia	Teucr.
Thuja occidentalis	Thuj.o.
Thyroidinum Thyroidinum	Thyr.

Trillium pendulum	Tril.
Trombidium muscae domesticae	Trom.
Tuberculinum bovinum	Tub.
Uranium nitricum	Uran-n.
Urtica urens	Urt-u.
Ustilago maydis	Ust.
Veratrum album	Verat.alb.
Viburnum opulus	Vib.opu.
Vipera betus	Vip.
Viscum album	Visc.
Wyethia	Wye.
Zincum metallium	Zinc.
Zincum phosphoricum	Zinc-p.

IN-TEXT QUESTIONS 6.1

Fill in the blanks in the following:

1. Tub. is the abbreviation of _____
2. Ham. is the abbreviation of _____
3. Urt-u. is the abbreviation of _____

Write the short forms of following drugs

1. Arsenic Album
2. Belladonna
3. Aurum Metallicum
4. Lycopodium
5. Arnica montana
6. Thyroidinum

7. Sulphur
 8. Spongia Tosta
 9. Mezereum
 10. Argentum Nitricum
-

ANSWERS TO IN-TEXT QUESTIONS

Fill in the blanks

1. Tuberculinum bovinum
2. Hamamelis virginica
3. Urtica urens

Short forms of the drugs

1. Ars.alb
 2. Bell
 3. Aur.met.
 4. Lyco.
 5. Arn.mon.
 6. Thy.
 7. Sulph.
 8. Spong.
 9. Mez.
 10. Arg-nit.
-

STUDY OF PRESCRIPTION AND ABBREVIATIONS USED IN PRESCRIPTION

7.1 INTRODUCTION

Prescription writing and reading is an important part of medical field. Prescription writing is duty of a qualified doctor and reading of a qualified dispenser. Thus a dispenser should have proper knowledge of various terms and notions used by doctor while writing prescription.

He should have knowledge of various parts of prescription and abbreviations used. He should be able to understand prescription made by Doctor and should be able to dispense medicines accordingly.

7.2 OBJECTIVE

After reading this chapter you will be able to understand

- Meaning of prescription
 - Parts of prescription
-

- Difference between drug, medicine and remedy
- Commonly used abbreviations in prescribing with their full forms

1 What Is Drug, Medicine And Remedy

Before understanding the meaning of prescription and its parts let us know the basic difference between drug, medicine and remedy.

Drug

Definition

Drug is a substance, which has the power to alter or change the functions or nutrition of a part or parts of the body. This change could be a positive one i.e. one which is good for the body or it can be negative i.e. one which is harmful for the body.

A drug has the capacity to bring about changes in humans as well as animals in their state of health or disease.

e.g. Morphine, Opium, Cannabis indica, Digitalis.

Medicine

Definition

In homeopathy Medicine is that drug which has been proved on healthy human beings of different ages and of both sexes, male and female and their subjective as well as objective symptoms have been thoroughly recorded.

A homeopathic medicine is one which is prepared according to Homeopathic Pharmaceutical guidelines and has its place in standard books of *Materia Medica* and which is given to patients according to the laws of similia.

e.g. Belladonna, Aconite, Apis, Phosphorus, Rhus tox etc..

These are some of the medicines, which have been thoroughly proved and have their place in standard books of *Homeopathic Materia Medica*.

Remedy

Definition

Remedy is that medicine which is given to the patient according to symptom similarity i.e. according to law of similars, so as to cure the sick individuals.

Remedies are of two types

1. *Short acting* – They are those remedies whose action lasts for a short period e.g. Belladonna, Aconite, Ipecac, Allium cepa, Chamomilla, etc.
2. *Long acting* – They are those remedies whose action lasts for a long period. e.g. Sulphur, Phosphorus, Tuberculinum, Lycopodium etc.

2. Prescription Writing/Reading

Definition

The word prescription originates from the Latin word "*Praescriptio*" meaning "prae-before" and "scribo = write".

Prescription means a written direction by a physician to pharmacist/dispenser for preparing a remedy for his patient, which is considered as most appropriate by the physician.

2.1 Parts of Prescription

The body of the prescription can be divided into four parts, they are:

1. **Superscription** – It is the heading consisting of the symbol 'Rx' which stands for the Latin word 'Recipe' which means 'to take'. In this part, the name, address and age of the patient, along with the word 'For' before his name, may be included.
 2. **Inscription** – This part contains the name of the remedy, potency, its quantity, also the vehicle with its required quantity. This part is the main trunk of a prescription.
 3. **Subscription** – This part contains the directions or instructions to a compounder or dispenser as to how he should dispense the remedy i.e. the
-

4. **Signature** – The last part contains the directions to the patient as to how he/she will take the remedy, along with the signature of the physician with his registration number and date.

e.g.

For Ms. Seema Kapoor,
Chandni Chowk, Delhi,
Age-28yrs.

Rx **Upto this belongs to superscription.**

Belladonna -30, IO globules No. 20 in purified water 20 ml.

This part is called Inscription

Mix. Put 12 marks **This is subscription**

To be taken 2 hourly

This is 'Signature'

Signature

Date..... Reg. no.

3. **Full Forms Of Various Abbreviations Used In Prescription writing.**

	Abbreviation	English meaning
1.	Aq. dest.	Distilled water
2.	Bis	Twice
3.	B.D.	Twice in a day
4.	c.m.	To be taken tomorrow morning
5.	c.n.	Tomorrow night
6.	c.v.	Tomorrow evening
7.	Gtt.	A drop
8.	H.S.	At bed time
9.	noct.	At night
10.	O.m.	Every morning
11.	O.n.	Every night

11.	O.n.	Every night
12.	O.H.	Every hour
13.	O.d.	Every day
14.	P.C.	After food
15.	Q.I.d./Q.I.D.	Four times a day
16.	Rx	To take
17.	Rep.	Let it be repeated
18.	S.O.S.	If necessary
19.	Stat.	Immediately
20.	T.I.D.	Thrice in a day

IN-TEXT QUESTIONS 7.1

Fill in the blanks in the following:

1. The word 'Prae' means _____
2. The word 'Scribo' means _____
3. The meaning of symbol 'Rx' is _____.
4. _____ part of prescription forms the main trunk.
5. _____ part of prescription contains the directions for a dispenser or compounder.

2 Give the full forms of these abbreviations

- a) Q.I.D.
 - b) B.I.D.
 - c) H.S.
 - d) O.D.
 - e) S.O.S.
 - f) stat.
 - g) T.I.D.
-

h) gtt.

SUMMARY

In this chapter you have learnt the difference between drug, medicine and remedy.

Drug is a substance, which has the power to alter or change the functions or nutrition of a part or parts of the body.

Medicine is that drug which has been proved on healthy human beings.

Remedy is that medicine which is given to patient according to symptom similarity. Further more we have studied about the various parts of prescription and the various abbreviations used by a homeopathic physician while prescribing.

ANSWERS TO IN-TEXT QUESTIONS

Fill in the blanks

1. Before
2. Write
3. To take
4. Inscription
5. Subscription

Full forms of abbreviations

- a) Four times a day
 - b) Twice in day
 - c) At bed time
 - d) Every day
 - e) If necessary
 - f) Immediately
 - g) Thrice in a day
 - h) Drop
-

8

DRUGS AND COSMETIC ACT, MEDICINAL AND TOILET PREPARATION ACT

8.1 INTRODUCTION

The homeopathic pharmacy comprises the following three aspects:

- (i) Manufacture or preparation of drugs and medicines.
- (ii) Commerce or / and trading.
- (iii) Profession or Practice.

8.2 OBJECTIVES

- A pharmacist or a homeopathic physician must be familiar with the existing laws and rules relating to the manufacture, sale of homeopathic drugs or profession.
 - He should also have the knowledge of the general laws relating to commerce, trade and taxation or by statute or rules promulgated by the Central or State Government.
-

- He should know about the import-export procedures, relating to import or exotic drug materials or medicines and also laws and rules of materials like alcohol (Department of Excise).
- All laws and rules may always be revised from time to time.

Manufacture, sale and distribution of homeopathic medicine are governed mainly by :

1. Drugs and Cosmetic Act 1940 (XXIII of 1940) and Drugs and Cosmetic Rule 1945 (amended) 1969; effective from: 6-12-69.
2. The Drugs and Magic Remedies Act (objectional adv.) (21 of 1954) and the rules (1955).
3. Medicinal and Toilet Preparation (Excise Duties) Act, 1955 (No. 16 of 1955)
4. Dangerous Drugs Act, 1930 and Rules-1957.

DRUGS AND COSMETIC ACT, 1940

This legislation regulates the import, the manufacture and the sale of drugs (including homeopathic medicines).

Provisions relating to :

- (i) Sale of homeopathic medicines (part VI-A).
- (ii) Manufacture for sale of homeopathic medicines (part VII-A).
- (iii) Labelling and packing of homeopathic medicines (part IX-A).

PART VI-A: SALE OF HOMEOPATHIC / MEDICINIES

- 67-A.** (i) Appointment of Licensing authority - State Government shall appoint Licensing authority for the purpose of sale of homeopathic medicines in specified areas.
- (ii) Application for the grant or renewal of Licence - to sell, stock or exhibit for sale or distribution of homeopathic medicine shall be made in Form 19B to the Licensing authority with payment of fees as fixed by the State Government concerned. If applicant applies for renewal of license after its expiry but within one month of
-

such expiry - the payable amount shall be double the amount of renewal fees.

67-B. Power of Licensing authority - Authority may delegate the power to sign Licenses and such other powers, to any other persons under his control.

67-C. Forms of Licence to sell drugs - Licence to sale, stock or exhibit for sale or distribute homeopathic medicines by retail or by whole-sale shall be issued in Form-20C or 20-D as the case may be.

67-D. Sale at more than one place-A separate application shall be made and a separate licence shall be obtained in respect of each place - if drugs are sold or stocked at more than one place.

67-E. Duration of Licences - Original or renewed licence shall be valid up to 31st December of the year following the year in which it is granted or renewed or as fixed by the State Government concerned - if not suspended or granted.

The licence shall continue until orders are passed on the application - if the application for renewal of licence is made before its expiry or if additional fee paid within one month after its expiry.

The licence shall be deemed to be expired if application for renewal is not made within one month after its expiry.

67-F. Conditions to be satisfied before a licence in Form 20-C or 20-D is granted:

- (i) The premises in respect of which the licence is to be granted - are clean and in case of licence in Form-20C, the sell-premises is in charge of a person who is or has been dealing in homeopathic medicines and who is in the opinion of the licensing authority competent to deal in homeopathic medicines.
 - (ii) Any person who is aggrieved by the order passed by the licensing authority under Sub-Rule (1) may within thirty days, from the date of the receipt of such order, appeal to the State Government and the State Government may, after such enquiry into the matter as it
-

considers necessary, and after giving the appellant an opportunity for representing his case, make such order in relation thereto as it thinks fit.

67-G. Conditions of Licence - Licence in Form 20-D shall be subject to the conditions stated therein and to the following further conditions, namely

- (i) Premises where homeopathic medicines are stocked for sale or sold, are maintained in clean condition.
- (ii) Sale of homeopathic medicine shall be conducted under the supervision of a person competent to deal in homeopathic medicines.
- (iii) The licence shall permit an inspector to inspect the premises and furnish such information as he may require for ascertaining whether the provisions of the Act and the Rules made thereunder have been observed.
- (iv) The licences in Form 20-D shall maintain records of purchase and sales of homeopathic medicines containing alcohol together with the names and addresses of parties to whom sold.
- (v) The licence in Form 20-C shall maintain records of purchase and sales of homeopathic medicines containing alcohol. No records of sales in respect of homeopathic potentised medicines in containers of 30 ml or lower capacity and in respect of mother tincture made up in quantities up to 60 ml need be maintained.

67-H. Cancellation and suspension of Licences :

- (a) The licensing authority may, after giving the licensee an opportunity to show cause why such an order should not be passed, by an order in writing stating the reasons therefore, cancel a licence issued under this part or suspended for such period as he thinks fit, if in his opinion the licensee has failed to comply with any of the conditions of the licence or with any provisions of the Act or the Rules made thereunder;

Provided that if such failure or contravention is the consequence of an act or omission on the part of the agent or employee, the licence shall not be cancelled or suspended unless the licensing

authority is satisfied;

- (i) That the act of omission was instigated or connived at by the owner of the business, or, if the owner is a firm or company, by a partner of the firm or a director of the company, or
 - (ii) That the owner of the business or an agent or employee of the owner had been guilty of a similar act or omission within twelve months before the date on which the act or omission in question took place and that the owner had, or reasonably ought to have had, knowledge of that previous act or omission, or
 - (iii) If the act or omission was a continuing act or omission and the owner of the business had or reasonably ought to have had, knowledge of that previous act or omission, or,
 - (iv) That the owner of the business had not used due vigilance, to ensure that the conditions of the licence or provisions of the Act or the Rules made thereunder were observed.
- (b) A licensee whose licence has been suspended or cancelled may appeal to the State Government whose decision will be final.

PART-IX-A: LABELLING AND PACKING OF HOMEOPATHIC MEDICINES

106-A. Manner of labelling of homeopathic medicines:

- (A) The following particulars shall be either printed or written in indelible ink and shall appear in a conspicuous manner on the label of the innermost container of any homeopathic medicine and in every other covering in which the container is packed:
- (1) The word 'Homeopathic Medicine'.
 - (2) The name of the medicine:
 - (a) For drugs included in the homeopathic pharmacopoeia of the United States or United Kingdom, the name specified in that pharmacopoeia.
 - (b) For other drugs, the name descriptive of the true nature
-

of the drug.

- (3) The potency of the homeopathic medicine - For this purpose the potency shall be expressed either in decimal, centesimal or millesimal systems.
- (4) Name and address of the manufacturer when sold in original containers of the manufacturer. In case of homeopathic medicine is sold in a container other than that of the manufacturer, the name and address of the seller.
- (5) In case the homeopathic medicine contains alcohol, the alcohol content in percentage by alcohol (volume, in terms) shall be stated on the label.

Provided that in case the total quantity of the homeopathic medicine in the container is 30 ml or less it will not be necessary to state the content of alcohol on the label.

(B) In addition to the above particulars the label of a homeopathic mother tincture shall display the following conditions:

- (1) A distinctive batch number, that is to say, the number by reference to which details of manufacture of the particular batch from which the substance in the container is taken are recorded and are available for inspection, the figure representing the batch number being preceded by the word 'Batch No.' or 'Batch' or 'Lot Number' or 'Lot No.' or 'Lot'
- (2) Manufacturing Licence number, the number being preceded by the word, 'Manufacturing Licence Number' or 'Mfg. Lic. No.' or 'M.L'
- (3) No homeopathic medicine containing a single ingredient shall bear a proprietary name on its label.

DRUGS AND MAGIC REMEDIES ACT AND RULES (Objectional Advertisements)

These act and rules thereunder are intended to protect the consumer and prevent the practice of misleading and extravagant claims made in respect of many medicines and especially those claiming as remedies for many diseases con-

sidered at present as incurable.

MEDICAL AND TOILET PREPARATIONS ACT-1955

It provides for the levy and collection of duty of excise on medicinal and toilet preparations containing alcohol, opium, Indian Hemp or other narcotic drugs or narcotics.

DANGEROUS DRUGS ACT -1930

This legislation relates to medicines containing opium, morphine, pethidine, etc. which are considered addiction-forming, dependence-producing drugs and regulates their manufacture, sale, profession, etc.

IN-TEXT QUESTIONS 8.1

1. What are the various acts relating to manufacture, sale and distribution of homeopathic medicines?
2. What is the significance of Form 20- Cor 20-D?
3. How is a homeopathic medicine to be labelled?
4. What does 'Medical and Toilet Preparations Act' deal with?
5. Is there any law against the misleading publicities by manufacturing companies? What is that?
6. What is the usefulness of 'Dangerous Drugs Act'?

ANSWERS TO IN-TEXT QUESTIONS

1. (i) Drugs and Cosmetic Act, 1940.
(ii) The Drugs and Magic Remedies Act.
(iii) Medicinal and Toilet Preparation (Excise Duties) Act, 1955 (iv) Dangerous Drugs Act, 1930.
 2. In Form 20-C or 20-D, the licence to sell, stock or exhibit for sale or distribution of homeopathic medicines by retail or whole-sale is issued.
 3. The following particulars should be either printed or written in indelible ink on the label of the innermost container of any homeopathic medicine
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and on every other covering in which the container is packed.

- (i) The word 'Homeopathic Medicine'.
 - (ii) The name of the medicine:
 - a. For drugs included in the homeopathic pharmacopoeia of the United States or United Kingdom, the name specified in that pharmacopoeia.
 - b. For other drugs, the name descriptive of the true nature of the drug.
 - (iii) The potency of the homeopathic medicine.
 - (iv) Name and address of the manufacturer when sold in original containers of the manufacturer. In case of homeopathic medicine is sold in a container other than that of the manufacturer, the name and address of the seller.
 - (v) In case the homeopathic medicine contains alcohol, the alcohol content in percentage by volume, in terms of ethyl alcohol shall be stated on the label.
4. Medical and Toilet Preparations Act provides for the levy and collection of excise duty on medicinal and toilet preparations containing alcohol, opium, Indian hemp or other narcotics or narcotic drugs.
 5. Yes - 'The Drugs and Magic Remedies Act and Rules'. These act and rules are intended to protect the consumer and prevent the practice of misleading and extravagant claims made in respect of many medicines and especially those claiming as remedies for many diseases considered at present as incurable.
 6. Dangerous drugs act relates to medicines containing opium, morphine, pethidine, etc. which are considered addiction forming, dependence producing drugs and regulates their manufacture, sale, profession, etc.
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9

DUTIES AND RESPONSIBILITIES OF A DISPENSER

9.1 INTRODUCTION

The homeopathic dispensary is a place where dispenser has to spend most of this or her time. He has to be responsible and accountable for the dispensing work that he does. He has to take care of the dispensary and ensure that it has friendly environment and at the same time it is safe to work also.

9.2 OBJECTIVE

- The dispenser should wear a clean apron, remove his shoes and wear clean slippers, put on a cap and wash his hands with soap.
 - After dispensing each medicine he should wash his hands. He should take care that dispensing papers are clean and phials are clean and properly corked.
 - The dispenser should be careful to provide proper medicines against the prescriptions one by one.
 - The homeopathic dispensary should be located in an unpolluted area, i.e., away from open sewage, public lavatory, insanitary surroundings, smokes, dust or any kind of obnoxious fumes or gases.
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- The dispenser should take care that the dispensary is well-aerated. The room should not have strong, direct sunlight, dampness or darkness. The room should be perfectly dry and clean and devoid of any kind of strong odour. The room should be spacious enough so that the mobility is not restricted.
- The dispensary should have separate provision for safe-keeping of dispensing papers, sugar of milk, globules, dispensing alcohol, glass phials, corks, label-books, distilled water etc. There should be a completely separate arrangement for keeping medicines in alphabetical order with separate place for keeping mother tinctures.

9.2 OBJECTIVES

After reading this chapter you will be able to:

- understand the duties & responsibilities of a dispenser.
 - The dispenser should have sound knowledge of scientific as well as frequently used common names of the homeopathic medicines with their commonly used abbreviations.
 - When instruction for preparation of dose of any medicine is not given, he must know how to prepare a dose in sugar of milk, distilled water. He should have a separate training of how to prepare and dispense medicines in 50-millesimal potency.
 - He should be well conversant with the size of bottles to be used for a specified quantity of medicine and also about the size of the globules asked for.
 - He should properly pack and dispense medicines in clean white papers and put them in small envelope before handing it over to the patient. He should clearly write the name of the patient, name of the doctor and directions of taking the medicines on the envelope.
 - The dispenser shouldn't provide any medicines without seeing the prescription of a qualified physician. Dispenser should always maintain the professional secrecy about not revealing to the patients the unmedicinal nature of placebo so frequently prescribed.
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- The dispenser should be well versed with the abbreviations and terms used in prescription.
- The dispenser must maintain a prescription record, stock-register and an inventory register.

IN-TEXT QUESTIONS 9.1

1. What should be the location of a homeopathic dispensary, ideally?
2. What should be required of a dispenser to be done before entering his dispensary?
3. What are the essential things that a dispenser must know?

ANSWERS TO THE IN-TEXT QUESTIONS

1. A homeopathic dispensary should be situated in clean surroundings, away from open sewage, public lavatory, smokes, dust or any kind of obnoxious fumes or gases. Thus ideally it should be situated in an unpolluted area.
 2. Before entering in the dispensary, the dispenser should wear a clean apron, put on a cap, remove his shoes and put on clean slippers in dispensary and should wash his hands with soap.
 3. A dispenser must know:
 - (i) The scientific and frequently used common names of homeopathic medicines with their abbreviations.
 - (ii) The terms and abbreviations used in prescription writing.
 - (iii) To prepare the dose strictly following the directions of the prescriber while dispensing.
 - (iv) When instructions for preparing dose/doses are not given, he should follow the standard method of preparing dose/doses.
 - (v) The method of preparing 50-millesimal potency medicines.
 - (vi) The size of globules.
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- (vii) The size of phials in which a particular quantity of medicine is to be dispensed.
 - (viii) How to pack and dispense medicines in sugar of milk.
 - (ix) He should maintain a prescription record of medicines dispensed by him.
 - (x) Dispenser should maintain a stock register.
 - (xi) Dispenser should maintain inventory register.
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FUNDAMENTAL DUTIES
Part IVA (Article 51A)

It shall be the duty of every citizen of India :-

- a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- c) to uphold and protect the sovereignty, unity and integrity of India;
- d) to defend the country and render national service when called upon to do so;
- e) to promote harmony and the spirit of common brotherhood amongst all people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- f) to value and preserve the rich heritage of our composite culture;
- g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- i) to safeguard public property and abjure violence;
- j) to strive towards excellence in all spheres of individual and collective activities so that the nation constantly rises to higher levels of endeavour and achievement.
- k) Who is parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

A brief Guide to NIOS web site

The success of Open Learning and Distance Education very much depends upon the harnessing of the new and latest technology. The emerging Internet and Web technology help in effective dissemination of knowledge, breaking all geographical boundaries. The web-site is a dynamic source of the latest information and is also an electronic information guide. The contents in the NIOS web-site is open to all.

The learners can have access to NIOS web-site at the following addresses:

<http://www.nos.org> & nios.ac.in

Clicking the site address will bring the users to the NIOS home page that will further guide them to visit different information pages of the NIOS. The NIOS is also developing a school network through the Internet known as Indian Open Schooling Network (IOSN). The network will provide a common communication platform for learners and educators. The NIOS is offering a Certificate in Computer Applications (CCA) through selected AVI. This course is also offered through the Internet on the NIOS web-site.

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