SECTION 2.1

An Introduction to the Basic Principles of Preparing, Dispensing & Storing Homeopathic Remedies

Objectives:

At the end of this section you should:

- know how potencies are prepared
- know how solid dosage forms are medicated
- be able to specify prescriptions accurately
- know how to handle and store remedies to avoid contamination and antidoting factors
- be familiar with the most convenient and economical ways to build up a stock of remedies

Specifying a homeopathic prescription

Dosage forms

The procedures involved in the dispensing of homeopathy may already be familiar to you since they are very similar to those required in orthodox practise. The nomenclature of most prescriptions will be familiar to you, although dosage forms and directions involve an additional understanding of some basic principles.

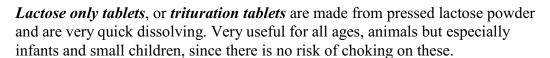
<u>Potencies</u> are mainly dispensed in solid form but are also sometimes used in liquid (usually 20% ethanol) for oral use.

<u>Solid dosage forms</u> are based on sucrose and lactose in various sizes. Efficacy is not affected by the form and it is chosen for the convenience of the patient.

The dosage forms commonly used are as follows:

Flat tablets (50% sucrose/50% lactose) are the most common and are quite hard, easily medicated (wetted) and can be sucked or chewed. They are most commonly used for adults.

Pillules are usually made from pure sucrose, are hard but very soluble and easily medicated. Used for all ages except infants.



Granules are tiny sucrose balls and are usually used for babies.

Powders are individually wrapped lactose packets and are used for all ages when just a few doses only are prescribed.

Liquid remedies are very suitable for babies and animals but are preferred by some adults if there is sugar intolerance.

Mother tinctures are often prescribed either internally or externally and are taken in drop doses in water.

Creams and ointments are commonly used and contain *mother tincture* (3-5%) as the active ingredient in an aqueous or lanolin base.



Flat tablets



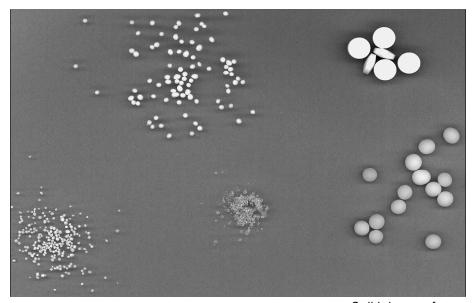
Pillules



Mother tinctures

Medication

Medication or impregnation is a technique which consists in fixing a homeopathic liquid potency on a solid dosage form. The liquid potency is considered as the active ingredient for homeopathic remedies. Hahnemann prepared his remedies in sucrose granule form and medicated them by filling a bottle of granules to the brim with the alcoholic potency, draining the excess out and drying the remainder on a filter paper. This has been modified over the years to simply add enough medicating potency to wet all the tablets, pills or granules etc.



Solid dosage forms

For practical purposes 1% v/w is a suitable guide given by the American and German pharmacopoeias for medication. Thus on a small scale e.g. a 2g bottle of tablets is suitably wetted by 1 drop of potency. This can be used as a minimum guide for larger quantities. As the strength of alcohol is above 70% (87-95% is the optimum) then there is no risk of disintegration of the tablet, even for the soft lactose tablets. Powders are medicated by adding one drop to the outside of the powder. The medication soaks through and wets the lactose inside.

Liquid potencies are medicated by using 1% of the potency even though a further dilution, but without succussion, occurs. e.g. 5 drops in 10ml. For very low liquid potencies the correct proportion should be used e.g. 1ml of 2x to 9ml diluent to create 10mls of 3x potency followed by a succussion.

Journal references on solid dosage forms

Walgate S, The question of machine made tablets of homeopathic medicine, Homeopathic World 1919 Nov;54(11): 436-437

Braun A, Die homoopathischen Globuli. Ein Beitrag zu Ihrer Geschichte, Allgem Homoopath Zeit 1987 Sep-Oct;232(5):192-6

Dubost JP, Guillemain J, Comparison of the kinetics of release of picric acid from two different types of homeopathic granules (French), Ann Pharm Fr 1984;42(4):323-8

Dosage

For tablets and pills, only one is necessary as a dose at any one time. There is, in fact, no clinical difference between taking one or two tablets. The same stimulus is received, regardless of the physical size of the dose, and so frequency of administration is a more important determinant of effect. The frequency of the dose is therefore a much more important consideration in prescribing.

For liquid potencies the same principle holds true, although *mother tinctures* (which are much more material in their content) require more precise attention. The most common dosages used here are 5 - 10 drops in water two or three times a day.

Powders are often given as single or split doses (i.e. 2 or 3) and are usually taken within 24 hours only. Remedies are absorbed via mucus membranes, Hahnemann described it as via 'the nerves in the mouth', so each dose should be held in the mouth or put under the tongue for at least a minute or two.

It is possible that there are drug-receptor interactions in the mouth*. It is for this reason that remedies should be taken on a clean tongue at least 15 minutes before or after food. Olfaction of the alcoholic vapour of the potency is also a method for administering a remedy but is rarely used.

(*Although the final remedy effect is unlikely to be due to the same kinds of agonistic/antagonistic phenomena, at these particular sites, as are postulated for standard pharmacology).

Journal References on Dispensing Precautions

Handle your medicine carefully, (pharmacy, drug packaging) Homeopathy 1971 Jun;21(6): 68-69



Before you continue:

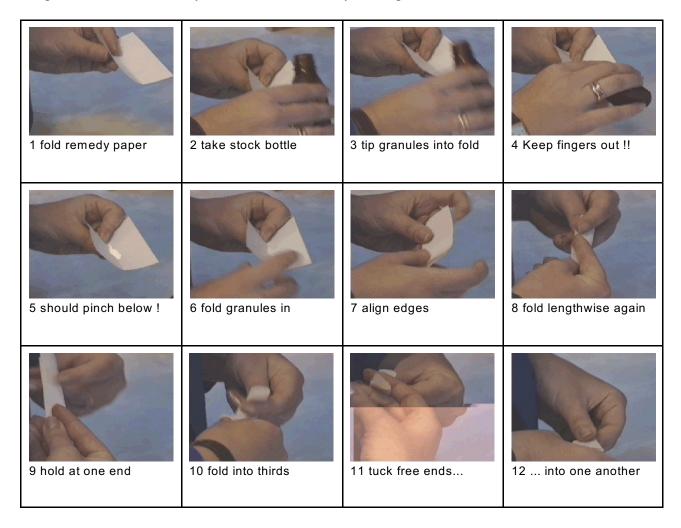
Can you name the main solid dose forms?

Can you give examples of other dose forms?

Dispensing single dose sachets of fine or coarse granules

Some large pharmacies make up stocks of blank sachets using a machine. These can be medicated directly and are suitable for short term storage only. Most pharmacies prefer to dispense in glass bottles, even for single or split dose regimen, with appropriate dosage instructions on the label. Sometimes, however, it is necessary to manually fold sachets of medicated granules as below.

Please note the dispenser below should not be holding the remedy paper using the medicating surface in steps 1-6. It is better to pinch a partially folded paper at one end from below. This creates a trap for the granules. Otherwise they roll into contact with your finger, or onto the floor!!



Storage and contamination problems

As homeopathic remedies are materially extremely dilute it is important to be aware of conditions which may adversely affect the remedies during dispensing or storage. Any physical contamination will affect them and it is very important that there should be no contact of remedies with contaminated glassware or apparatus and breaking bulk is not recommended.

Contact contaminants

Do not use tablet counters or triangles unless they are washed thoroughly and blanched with boiling water. Although quite robust, medicines have still been seen to work when put into water troughs in cow sheds! Every effort should be made to not handle them or expose them to physical impurities and it is best for patients to transfer the tablet into the cap before taking it.

Volatile contaminants

Essential oils, perfumes and other strong smelling reagents or drugs are particularly invasive and should be kept well away from homeopathic dispensing areas. Odours from the morning coffee are also to be avoided. Beware that many cleaning agents and bleaches contain volatile solvents. These are best avoided in the pharmacy during working hours. Encourage cleaning staff to use simple detergents. If solvents or volatiles are required, they are best used at the end of the working day, after the day's dispensing work has been done. This gives them time to disperse before dispensing recommences.

Energic and electromagnetic influences

The molecular and quantum representation of the remedy is likely to be vulnerable to breakdown by heat (the exact temperature is unknown, but prolonged temperatures above blood heat should be avoided). Storage under 30°C is the guide for good manufacturing practise.

Ultra violet from direct sunlight is also to be avoided and is thought to deactivate remedies. The influence of X-rays at airport terminals are as yet unknown and it is hard to give a definitive answer. Some homoeopaths believe that they have noticed a detrimental effect and others are equally sure that there is not a problem passing through x-rays. Perhaps, like the human organism, the answer is dependant on the number of exposures. In the absence of a device to objectively measure activity within potencies, the full answer to this question will take some time to emerge.

Electromagnetic fields around electrical and computer equipment are best limited by avoiding the siting of electrical equipment close to remedy storage cabinets. Apparatus should have adequate screening within their enclosures. Some pharmacies have earthed plates installed in the walls of their storage cabinets.

Reference on Pharmacy Organisation & Contaminants

Efstathiu Y Kiprianu K Kalamara A Hiliopulos S. <u>Organisation and structure of a modern homeopathic pharmacy.</u> Proc 43rd LMHI Congr, Athens, Greece, 1988, :181-184

Metal cabinets provide screening

Zacharias CR. <u>Contaminants in commercial homeopathic medicines: a spectroscopic determination.</u> Br Homoeopath J, 1995, Apr;84(2):71-4

© CIMT Ltd & Authors: R Malcolm / J Morgan 6

Interpreting a request for a homeopathic remedy

As with any prescription the drug name, strength, quantity and dosage are usually present. Many remedy names will be unknown to you at this stage, because of the many hundreds that are in common use. In view of this, a Materia Medica such as Boericke is highly recommended as a reference book. It has both common and Latin names for over 800 remedies.

<u>Caution</u>: Many names are similar and commonly confused e.g. *Cina* and *China*, *Alumina* and *Alumen*, and many plant have two species commonly used e.g. *Veratrum album* and *Veratrum viride*.

The potency should be easy to identify in the absence of any dilution scale guidance. The x or d suffix denotes a *decimal* scale potency. c or cH indicates the *centessimal* 'c' scale. A *centessimal* potency is also inferred when no potency suffix is supplied (eg. *Puls*. 6 = *Pulsatilla* 6c)

The dosage form will usually be stated, but infer tablets if not. Unusual forms are stated, but practitioners obviously will need to be contacted if in doubt. Patients themselves can also be very helped, if they are familiar with what they usually have.

The quantity is less accurately stated than in most conventional prescriptions and it is common to express the quantity in gram size rather than number of tablets. Even if the number of tablets is specified, it is recommended that you give the nearest original pack, i.e. bottle size, rather than counting out tablets for the reasons already given.

most common dispensing quantities

7g. = approximately 60 tablets (8g for some manufacturers) 14g = approximately 120 tablets

less common dispensing quantities

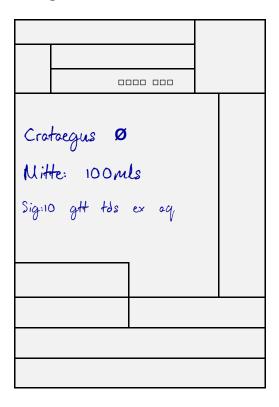
2g for some portable remedy kits 25g, 50g, 100g, 250g, 500g usually stock quantities

Journal articles on Homeopathy in the Community Pharmacy

Ainsworth JB, <u>Homeopathy and the community pharmacist</u>: part 1, Homeopathy 1990 Oct:40(5):131-2 Gay S, <u>Making the most of your pharmacist</u>, Homeopathy 1991 Apr;41(2): 41-44 Glew J, <u>A day in the life of the pharmacist</u>, Homeopathy Today 1991 3(1): 9-11 Glew J. <u>A day in the life of a homeopathic pharmacist</u>. Health Homoeopath, 1993, Summer;5(3):21-23 Kayne S. <u>Homeopathy and the community pharmacist</u>. Chemist and Druggist, 1993, Oct:6-8 Pinkus AS, <u>Homeopathy for the pharmacist</u>, Homeopathy 1990 Jul;40(4):117-20

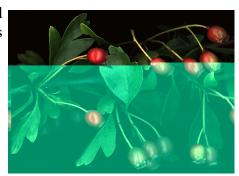
Prescription examples

Example 1

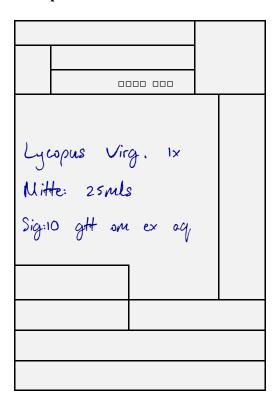


This is a prescription for a *mother tincture* and the Ø sign is commonly used. Sometimes M.T. is written instead.

Crataegus is a common remedy for arteriosclerosis, high blood pressure and irregular heart beat and like all mother tinctures is given in water due to its high ethanol content and strong taste.



There is no need to take tinctures away from food and drink as their action is a material herbal stimulus and can be safely repeated for months if needed.



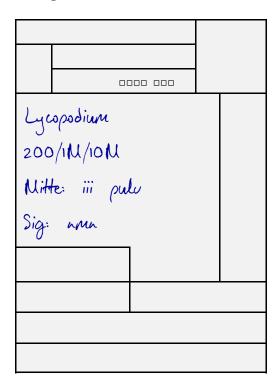
Notes

The 1x potency referred to here is a common area of confusion amongst even experienced homeopathic pharmacists. It is important to know what strength is expected by the prescriber - contacting them if in any doubt.

Very few homeopathic practitioners are aware of the fact that mother tinctures are formulated to be 1 in 10 i.e. 1x already and 1x requests expect a dilution of mother tincture one in ten. This prescription is prepared by diluting 2.5mls of mother tincture to 25mls of a low (25%) alcohol solution.

Care is taken to observe there is no precipitation when diluting. If this occurs then an alcoholic solution nearer to the same strength as the mother tincture is required.

This remedy *Lycopus virginicus* is another phytotherapeutic treatment, commonly used long term for heart conditions where there are palpitations and valvular disease.



Notes

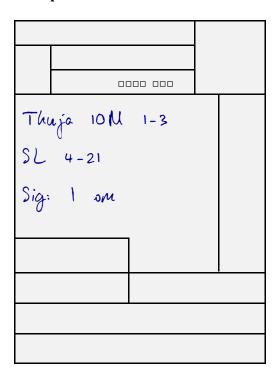
This is an example for the use of powers to deliver three doses of differing potency. Three powders are prepared and numbered 1, 2, & 3. They contain one drop of *Lycopodium clavatum* 200, 1M and 10M respectively.

Lycopodium clavatum is a deep acting medicine and is an example of a polychrest remedy. It is often prescribed on a 'constitutional' basis and may continue to act for several weeks, or even months, without repetition. It has been carefully chosen to cover all the symptoms of the patient thus treating the whole person and if successful will have a very deep curative reaction.



Due to the need to take the powders in sequence the ideal directions would be:

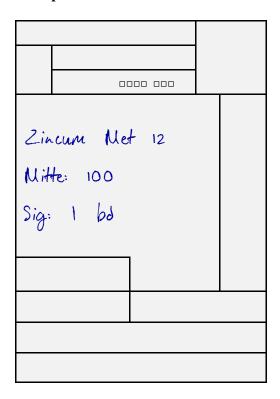
'One powder to be dissolved under the tongue tonight, tomorrow morning and night in order numbered.'



Notes

This again specifies numbered powders but with only *Thuja occidentalis* 10M medicated on powders 1 to 3. The rest are blank *saccharum lactis* (SL; sac. lac.; sugar lactate) ie. placebo.

Practitioners quite often give the patient something more substantial than the incredulous 3 doses only. Sometimes another remedy is added, say from powders 22-24 and SL continued to 50 powders. These are common ways of controlling the timing of active doses in a way that is comprehensible and convenient to the patient.



Notes

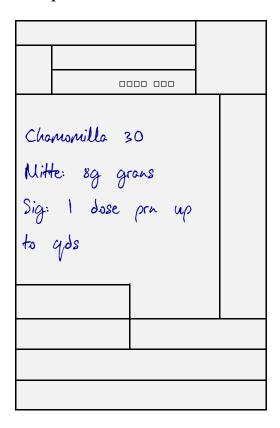
In this example the *centessimal* scale is inferred with just the number for the potency.

The quantity is given in detail but an 'original pack' nearest to it is recommended. Prescribers often put a size they know from the pharmacy they use, but most manufacturers have a size near to 100 tablets for example.

If OP (*original pack*) is put on the prescription for the quantity, then a month's supply or convenient pack size (e.g. 100 or 125 tablets as in most *over-the-counter* remedies) is used.

The dosage form could be tablets or pills - if this is not stated, there is usually no preference but the pharmacist should check with the prescriber if in doubt.

If the directions 'take 15 minutes before or after eating or drinking' can be put on the label, after the 'one to be taken twice a day' or at least communicated to the patient, so much the better.



Notes

Here is a common preparation for teething babies and granules are an excellent way of administering a dose.

As one granule is very tiny, the recommended amount for a dose is enough granules to cover the bottom of the cap, in this case when required up to four times a day.

('Chamomilla' indicates *Matricaria chamomilla*. This highlights the problem of changing plant nomenclature and the use of abbreviated terms of convenience. Other common homeopathic contractions include: Belladonna (Atropa belladonna), Stramonium (Datura stramonium). There are unfortunately many others. Moves are afoot internationally to update remedy names and achieve a consensus on their terminology.)



Chamomilla

Journal articles on prescription dispensing

Challis SJ, Homeopathic hospital pharmacist, Br Homoeopath J 1977 66: 190 Male RR, *Dispensing homeopathic chemist*, Br Homoeopath J 1977 66: 193

Setting up a range of remedies

The degree to which you introduce homeopathic remedies into the pharmacy is obviously dependant on your enthusiasm for it and the demand from your customers. The easiest way to start is to introduce a retail range from an established manufacturer. These are usually in a display stand of between 18 to 36 licensed remedies. These usually have literature or first aid kits associated with them. You should study the remedies in the range quite thoroughly. It is surprising how many counter prescribing requests you can cover with a good knowledge of just a few well known remedies.

With the ever growing demand for homeopathy it is likely you already have a shop range in place and want to go further. If you need to have access to a wider range of remedies then there are homeopathic manufacturers who can supply thousands of different remedies as 'specials', for dispensing and counter prescribing.

Buying remedies as original packs is the easiest way to manage your stock. Cross contamination policies are necessary when breaking bulk. This is more realistic in larger pharmacies where the division of labour means that staffing costs are low enough to justify both staff time, and the implementation of contamination precautions. Considerable storage space and cataloguing is needed for even 100 common remedies stocked in 3 or 4 sizes and potencies, e.g. 6, 30, 200, 1M. This can be an extra space pressure in a small dispensary.

If supporting a local practitioner then their remedy preferences will soon become apparent. Next day supplies from manufacturers is the norm for pharmacies, so even new remedy requests can be quickly accommodated.

Some pharmacies prefer to buy high alcohol medicating liquids and placebo tablets. This allows them to assemble remedies themselves, by simple medication of dosage forms, in house. This option requires more initial investment but provides flexibility and cuts down storage. It is also more economical in the long term, although slightly more labour intensive.

One bottle of 100 drops of potency can medicate many small bottles of tablets and so much of the cost of a finished remedy is the labour involved. If in house medication is chosen as an option it is desirable to have a area separate from the conventional dispensing activities as contamination and antidoting factors must be considered when high alcohol potencies are used.

Good training is vital and a simple written procedure manual is recommended for reference, e.g., it is recommended that only one medicating potency is open at a time. Open bottles should never be brought into close proximity with another containing a different remedy. Being volatile and flammable, ethanol spillages need immediate attention.

Some extra apparatus such as test tubes, stoppers, storage boxes or drawers may also be necessary. This approach, although more involved, is enjoyable and practical giving one the satisfaction of a more hands on approach. However large the step or investment into homeopathy, it is fascinating and rewarding for pharmacists and much appreciated by benefiting customers.

Summary Checklist for SECTION 1.2.3

Before proceeding to the next section check that you:	
	know how potencies are prepared
	know how solid dosage forms are medicated
	are able to specify your prescription accurately
	know how to handle and store remedies to avoid contamination and antidoting factors
	be familiar with the most convenient and economical ways to build up a stock of remedies