



PSW PROGRAM

PSW 1025: MEDICATION MANAGEMENT MODULE



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September 2019
Updated Feb 2021

Introduction

This module was created to help PSW students understand their role as it relates to Medication Management. It is meant to supplement the chapter assigned in the PSW Textbook- not replace it. Medication, medicine; both refer to a substance used to treat a medical condition. Medications are not all the same. There are three basic types:

□ **Prescription medications.** These are ordered by a doctor or nurse practitioner and filled at a pharmacy or by mail order. Prescription medications can be either “generic” or “brand name.”

□ **Over-the-counter medications (OTC).** These are sold without a prescription. They include aspirin, laxatives, cold medicines, and others.

□ **Herbal medications.** These include vitamins, dietary supplements, and herbal teas that are sold at pharmacies, health food stores, or botanicas. Medications can come in one or more forms: pills or capsules, liquids, patches, medicated creams, inhalers, injectable solutions, chewable or dissolving agents

(more on this in the PSW Textbook, lecture and power point slides)

History of Medication

The history of medication has been documented all the way back to ancient Egypt (2,700 BC). For example, in the Stone Age humans discovered edible plants that seemed to cure ailments or soothe a fever. This is a perfect example of how the use of herbal medicine was part of traditional medicine- and it is still an important part of medicine in this century! Below is a timeline identifying some of the great historical moments of medication history.

TIME FRAME	HISTORICAL EVENT
B.C.	The snakeroot plant has traditionally been a tonic in the east to calm patients; <i>it is now used in orthodox medical practice to reduce blood pressure.</i>
Ancient India	Doctors gave an extract of foxglove to patients with legs swollen by dropsy, an excess of fluid resulting from a weak heart; digitalis, a constituent of foxglove, is now a standard stimulant for the heart.
Ancient South America	Curare, smeared on the tip of arrows in the Amazonian jungle to paralyze the prey, is an important muscle relaxant in modern surgery.

B.C.	Incantation, spells and self-induced trances (often assisted by herbal drugs) form the standard practice of the medicine man or shaman.
Ancient India	Susruta, the founding father of Indian medicine, establishes a classic text, the <i>Susrutasamhita</i> . He identifies 1120 diseases, lists 760 medicinal drugs.
Ancient China	<p>A Chinese text, the <i>Nei Ching</i> or 'Book of Medicine', describes the practice of acupuncture. The document is written in about the 1st century BC, by which time acupuncture is already a long-established tradition.</p> <p><i>The underlying theory is that a healthy body depends on a flow of energy. This can be interrupted by blockages, which may be either the symptom or the cause of illness. Inserting a needle into the correct spot on the energy path (as many as 365 possible places are specified) will improve the energy flow by clearing a blockage or releasing pressure.</i></p>
13 th Century	Anesthetic: The doctor mixes in a brass vessel, specific proportions of opium, hemlock and the juice of mandragora, ivy and unripe mulberry. The mixture is to be boiled with a sponge, until all has been reduced and soaked up. The sponge should then be applied to the nostrils of the patient. When the time comes to wake the patient up again, after the surgery, a sponge full of vinegar should be applied to his nose.
1545	The traditional treatment of any gunshot wound (violently cauterizing it with boiling oil because it is assumed to be poisoned by the gunpowder), does considerable extra harm to the patient. Dr. Paré achieved much greater success by simply dressing the wounds with a mixture of egg yolk, oil of roses and turpentine.
1658	Pain Killer: rose water with white of egg and liquorice
17 th 18 th century	<p>Immunization: Treatment of smallpox: pus from the skin of a lightly infected person rubbed on a fresh scratch of person being inoculation</p> <p>1747 James Lind publishes his Treatise of the Scurvy stating that citrus fruits prevent scurvy</p> <p>1796 Edward Jenner develops the process of vaccination for smallpox, the first vaccines for any disease</p>

18 th century	<p>1800 Sir Humphry Davy discovers the anesthetic properties of nitrous oxide</p> <p>1857 Louis Pasteur identifies germs as cause of disease</p> <p>1879 First vaccine developed for cholera</p> <p>1881 First vaccine developed for anthrax by Louis Pasteur</p> <p>1882 First vaccine developed for rabies by Louis Pasteur</p> <p>1896 First vaccine developed for typhoid fever</p> <p>1897 First vaccine developed for Bubonic plague</p> <p>1899 Felix Hoffman develops aspirin</p>
19 th century	<p>1970 First vaccine developed for rubella</p> <p>1974 First vaccine developed for chicken pox</p> <p>1977 First vaccine developed for pneumonia</p> <p>1978 First test-tube baby is born</p> <p>1980 First vaccine developed for meningitis</p> <p>1980 Smallpox is eradicated</p> <p>1981 First vaccine developed for hepatitis B</p> <p>1992 First vaccine developed for hepatitis A</p> <p>1996 Dolly the sheep becomes the first clone</p>
2006	<p>First vaccine to target a cause of cancer</p>
2000-	<p>Return of diseases such as Measles, Bubonic plague, Mumps and Scarlet Fever</p> <p>Tuberculosis now multi drug resistant-</p>

Sources:

1. <http://www.datesandevents.org/events-timelines/10-history-of-medicine-timeline.htm>
2. <http://www.historyworld.net/wrldhis/PlainTextHistories.asp?groupid=474&HistoryID=aa52&qtrack=pthc#ixzz60GiOjlcW>

The chart above is a VERY SMALL snapshot of how medicine being offered to patients has evolved. If you want to learn more the two websites listed under sources are great places to start.

In summary, the history of the use of substances to heal, prevent illness and to prevent pain is long. Some ancient practices are still being used and thanks to devoted scientists we also have more medication to choose from today.

A Brief Look at Today's Medication Environment

- an increased number of people with chronic illnesses, multiple diseases in addition to adults living longer result in patients taking many medications. This is called “**polypharmacy**”.
- Not all medicine is covered by insurance plans or provincial health coverage resulting in people not being able to afford medication, refills etc.
- Increasingly difficult to manage medication to ensure medications are being used appropriately
- Drug resistance is common (MRSA, TB)
- Older adults have unique needs related to medication due to their complex regime and therefore often a lack of compliance)

Medication Management

Medication management involves patient-centred care to optimize safe, effective and appropriate drug therapy. Care is provided through collaboration with patients and their health care teams. Medication management also includes the monitoring of medications that a patient takes to confirm that he or she is complying with a medication regimen, while also ensuring the patient is avoiding potentially dangerous drug interactions and other complications. To gain a better understanding of the term “Medication Management” here is a breakdown (definition) of the two words:

Medication: a substance used for medical treatment. Can also be referred to as medicine, drug, cure, treatment or mixture.

Management: process of controlling and organizing of something (aka monitoring). It can also be referred to as supervision.

Specific monitoring related to Medication Management includes:

- ensuring medications are taken in specific doses at set intervals since missing doses or timing doses incorrectly can cause complications. There are many methods to managing a patients medication, for example: devices that issue reminders to patients to take their medications to filling pill cases for patients and marking the lid of each compartment to indicate when the contents need to be taken may be used.
- checking for harmful drug interactions and confirming that patients follow directions for taking drugs. This includes ensuring that patients on medications with known harmful interactions are not provided with conflicting prescriptions.
- reminding patients about whether drugs need to be taken with food and warning them about potential side effects such as fatigue, hunger, or altered level of consciousness that might disrupt their activities.

- Several systems can be used to help manage medications, from computers at a pharmacy that track prescription history in order to issue warnings when conflicting drugs are prescribed, to keeping detailed patient records for healthcare providers to use when writing prescriptions.
- Working directly with patients to increase compliance with drug regimens by showing them how and when to use their medications and stressing why compliance is important.
- Care providers are responsible for documenting that patients are getting their medications on time and in the correct doses.
- Care providers are also responsible for observing, reporting and recording any side effects of the medication.

For medication management to be safe, effective and client-centered all team members must be diligent in ensuring correct procedures and process are followed.

Medication Management Teams in Ontario

The Medication Management team in Ontario consists of Medical Doctors, Nurse Practitioners, Pharmacists, Registered Nurses, Registered Practical Nurses and Personal Support workers. A chart is provided in this section briefly outlining the responsibilities of each professional. What is of importance is the role of the PSW and how the responsibility of PSWs is increasing.

Now, with increased client care being given in the community setting; more PSWs are being delegated to administer medication and are also being expected to monitor a client's medication regime more closely. It is important to note here that employers will have defined expectations for their PSW. As a graduate PSW you must always check with employer (i.e. job description) to ensure you are working within the scope the employer has set.

Team members involved in Medication Management

Team Member	Responsibilities
MD/NP/Psychiatrist	<p>Assess patients physical and mental condition Give a medical diagnosis Prescribe medication as part of treatment plan</p>
Pharmacist	<p>Identify actual or potential drug therapy problems Formulate and implement care plans to prevent and/or resolve drug therapy problems Recommend, adapt or initiate drug therapy where appropriate Monitor, evaluate and document patients' response to therapy Collaborate and communicate with other health care providers, in partnership with patients</p>
RN/RPN	<ul style="list-style-type: none"> ■ assess the appropriateness of the medication practice by considering the client, the medication and the environment ■ seek information from the client about their medication, as needed ■ provide education to the client regarding their medication ■ collaborate with the client in making decisions about the plan of care in relation to medication practices ■ promote and/or implement the secure and appropriate storage, transportation and disposal of medication • promote and/or implement strategies to minimize the risk of misuse and drug diversion ■ take appropriate action to resolve or minimize the risk of harm to a client from a medication error or adverse reaction ■ report medication errors, near misses or adverse reactions in a timely manner, and ■ collaborate in the development, implementation and evaluation of system approaches that support safe medication practices within the health care team
PSW	<p>assists with medication * this is the term used and differs from administration.</p>

*role now evolving to include administration in community settings (NOT in facilities)

EVOLVING PSW ROLE IN MEDICATION MANAGEMENT

As the role of nurses is constantly evolving; the effects can be seen on the expansion of the role of the PSW. Nurses are managing increased work loads and as a result PSWs are now being requested to do more than their training provides. PSWs are usually prohibited from administering medication that is injected, inserted, or inhaled regardless of where they work. These skills are beyond the scope of practice and historically are not taught in PSW programs. The PSW role is to **“assist”** with medication. When a PSW assists a client with medication they may do one/more of the following

1. Reach for or bring pill container to a client
2. Provide water to the client to take medication with
3. Assist the client to read the label
4. Assist the client by removing cap off of a pill container
5. Returning medication to appropriate storage spot
6. Assist client in recording when medication taken

The growing trend is that now, in community settings, a PSW may be asked to **administer** medication and be a more active member of the Medication Management team-with this comes additional responsibility. With companies looking for ways to save money it became common practice to ask PSWs to administer medication to clients. In addition to financial reasons it is found to be more convenient to have a PSW do this. If they are already on location, instead of asking another person (RN RPN) to visit, it makes more financial sense to have a PSW there. This occurs in community and not in facility-based settings because; according to Ontario legislation, A PSW cannot administer medication in a facility governed by either the Ontario *Long Term Care Homes Act* or one of Ontario's hospital acts. This includes most long-term care homes and hospitals. In such places, only a Registered Health Professional (RHP), such as a Registered Nurse, can administer medication.

What adds to the confusing situation is there is no provincial/national/official job description for PSWs as it varies in every setting. In addition, this unregulated worker does not have national standards that dictates what the official scope of practice is. We are now faced with PSWs having different responsibilities dependent on where they work, who they work for and of course there is an exception to the rule.

EXCEPTION TO THE RULE: AKA DELEGATION

PSWs can help to administer medication that is injected, inserted, or inhaled if the administration of such medication is routine. By routine, the following conditions must be met:

- The administration of the medication is performed regularly
- The client's health condition is stable
- The expected outcomes of the medication are known
- The PSW has been taught how to help administer the medication either by the client or by a health professional

Employers will likely have further restrictions and rules on medication administration and this topic will be covered more in PSW 1001.

PSW ROLE IN ASSISTING WITH MEDICATION	PSW ROLE IN MEDICATION MANAGEMENT
	In addition to responsibilities on the left PSWs are now expected (in some settings)
<p>Remind client to take medication when the client is physically able to do so</p> <p>Provide some help with physical tasks, such as helping the client to open a bottle or blister pack, when asked by the client</p> <p>Hand the client the contents of a dosette or individual-dose blister pack at the proper time, when asked by the client</p> <p>Apply topical medications, transdermal patches, administering eye, ear and nose drops</p> <p>Open a medication bottle, pour out the proper amount of liquid or oral pill medication, and give the medication to the client at their request or as instructed in the support plan.</p> <p>report any irregularities with a client's medication. An irregularity can include such things as a client having taken too much medication, having taken it at the wrong time, or having forgotten or refused to take it.</p>	<p>Assess client and need for medication (with assistance from nurse)</p> <p>Provide simple health education related to the medication regime</p> <p>Have basic knowledge of the medication being given to the client</p> <p>Evaluate the effectiveness of the medication</p>
<p>Factors that determine if and how a PSW can assist a client in medication</p> <ol style="list-style-type: none"> 1. Legislation 2. Workplace Setting 3. Employer Policy 4. PSW Liability 	
<p>Can perform delegated tasks which have been delegated by an RHP in compliance with the RHPA for which transfer of functional training has been completed, such as insertion of a digit or instrument into a body cavity, care or procedure under the dermis and any task or skill needing a physician's prescription.</p>	

Summary

The PSW Textbook provides robust coverage of the PSW role in assisting with medication. In this module, the expanded responsibilities of the PSW in Medication Management are introduced. A combination of reading the appropriate chapters in the textbook, attending lectures, reading the power points and researching resources like

OPSWA and CNO websites; students will have a full picture of how this ever-changing topic continues to evolve. Please note, topics within Mosby's PSW Textbook related to Medication Administration include:

- Medications: routes, how they work, are prepared, routes drug actions, interactions and side effects
- Pharmacology: drug classifications, labelling
- Legislation (RHPA, CNO)
- Delegation
- Rights of Medication
- Safety: principles of assisting with medication, calculating medication dosages, national resources
- Documentation: including abbreviation errors, ORR