

## Chapter 1. Introduction.

Why is the History of Pharmacy important to students?

History defines who we are and what we do. Many movies use a theme of a person with amnesia who doesn't know who they are. This is portrayed as a depressing and demoralizing situation. The person is desperate to find out who they are and where they fit into society. On an international level many countries are antagonistic to one another for historical reasons.

The historical events that have resulted in our current situation are often still relevant. It is generally true that social and cultural change is slow, much slower than technological or economic change, and that some social and cultural aspects of our society evolve slowly.

The way we practice pharmacy today depends on the decisions that were made yesterday and those depend on the decisions made the day before, ad infinitum. There are, however, some momentous events that clearly mark a change in direction or method of practice. For example, on 1 April 2007 the pharmacists in Alberta were given the right to prescribe medication. This kind of change is a response to events in society and each society will have different priorities and events. However, the initiative in this case has stimulated and justified similar action in other provinces.

Pharmacy practice varies from region to region and from country to country. The reason for these differences are the result of some historical decisions that were made. By knowing about these decisions and their impact we have a better appreciation of the social and economic forces that influence pharmacy practice. The decisions are usually reflected in legislation and regulations that govern pharmacy practice. It is well recognized that pharmacy is enmeshed in a bewildering array of regulatory constraints. It is difficult if not impossible to practice without ignoring some of the regulations. Some pharmacists state that their most important function in providing patient care is to abide strictly to the law. While this is in response to the actions of some of their colleagues, in other health professions this is rarely stated and instead have varying statements about how they help the patient. This regulatory worship is an aspect of pharmacy that has evolved with little opposition by pharmacists. Various pressure groups have been successful in pushing legislation that constrains pharmacy practice and pharmacy organizations have been ineffective in opposing much of the restrictions. .

Pharmacy practice takes many forms. If we look at a community pharmacy in which medication is being dispensed we note that there are many variations in the procedures, records, pricing and staff used. To illustrate this consider dispensing: a prescription for methadone, an oral contraceptive, Clozapine, penicillin, a newly introduced expensive product (Remicaid) and a coal tar ointment. For each of them there is a different set of criteria and procedures to be met. Why is that? In looking at each of these procedures it would seem that they are straight forward, well understood and would not need any explanation or justification. If that is so, why do pharmacists in other countries use different procedures?

The decisions made in a pharmacy are usually the result of some social or economic forces that arise. If patients demand fast service and don't come to the pharmacy unless they receive fast service, what kind of decisions will be made? If the licensing body recommends that certain nonprescription products be placed behind the counter and personally sold by a pharmacist, what decisions will be made? If the third party payor asks for additional information before reimbursement, what decisions will be made? In looking at these examples it is clear that they spring from social demands in the society in which pharmacy is practised and will vary. If there are a large number of decisions over a long period of time the practice of pharmacy can evolve in quite different ways in different places. This is clearly illustrated by looking at the various forms of practice in other countries and the difficulty in trying to establish a uniform curriculum or legislation.

One reason for looking at history is that there are lessons to be learned. For example, in the period from Canada's beginning to 1867 to the 1940's there was little health insurance and patients had to pay for whatever services they needed. Since physician services were relatively expensive many patients came to the pharmacy with their health problems to see if they could be resolved with medication. Pharmacists were the "poor mans doctor" and many pharmacists were referred to as "doc". This close link to the patient and the recommendation of medication was lost in the period 1950-75 as a result of pharmacist dispensing the new expensive pharmaceutical products and being prevented from giving patients information about them, a practice that evolved for reasons that are not entirely clear. When pharmacists again began to give more information to the patient it was helpful to have the historical relationship to fall back on rather than appear to be moving into a new area and competing with the physician. Fortunately many older people remembered the former role of the pharmacist and were prepared to work closely with their pharmacist.

What does a pharmacist do?

The most important activity of the pharmacist is to ensure appropriate therapy and outcomes. This entails discussing the prescribed medication with the patient to ensure that the intent of the prescriber is clear and that the patient's benefits are understood. It also encompasses an evaluation of the therapy to ensure that the risk to the patient is minimized.

To perform this function well the pharmacist requires a strong scientific and communication background. They also develop skills from their practice that enable them to search out drug related problems and to resolve them. These problems may involve allergies or sensitivities to certain drugs, appropriate dosage, compliance, taste or ease of administration, drug interactions and interference with laboratory tests. Taking these factors into account, the pharmacist works with the patient to set out a treatment plan that will achieve specific treatment goals. This process is recorded and the outcomes

are monitored.

## Dispensing Medication and Devices

The pharmacists' responsibilities normally begin when a patient presents a prescription order. This initiates the process of pharmaceutical care and also the activities of dispensing. To process the medication order the pharmacist quickly authenticates the order, checks the dosage, notes the quantity or duration of therapy, cross checks the medication with other therapy and ensures that there is a product in stock. Although problems rarely occur, the pharmacist needs to be aware of the status of the drug product (withdrawn from the market, need for lab tests, etc) and its availability (investigational drug, emergency authorization, short stock item). Once the order is checked it can be prepared for the patient. This involves placing the correct quantity of the medication in a properly labeled container with any necessary auxiliary labels and adequate instruction on the administration of the medication. The medication will then be delivered to the patient either directly or indirectly. If the patient is not present there is a need to ensure that the instructions for use are clearly conveyed. These activities constitute the major focus of current pharmacy practice and the legislation and regulations are developed in this context. There is little said about activities that do not involve a drug product. Why is this? Is there a historical reason?

## Students and History

Canadians interest in History is mainly found in older people. For the most part Canadians do not have a strong knowledge of Canadian history although they do think that it is important that people do know their own history. Immigrants to Canada are required to learn some of the history of Canada in order to become citizens.

It is interesting that although young people do not have an interest in history and resist learning Canadian and pharmaceutical history, they often go to Europe on graduating to see all the historical sights! A survey of Canadians showed that for young people sport and music were rated highly while history was quite low. Older people gave history a high rating.

Students in Pharmacy tend to bond with their class to create a sense of unity with a loyalty to the Faculty. When they graduate they become part of provincial and national pharmacy organizations. They also become part of the international pharmacy community in which the pharmacists in each country vary in their practice and structure. Despite all these differences most pharmacy communities have a common historical background.

This book attempts to make history interesting and readable to young people. It also aims at improving the students' knowledge of Canada as well as the pharmaceutical aspects.

This has led to a simplified sketch of Canadian history and of the history of pharmacy in Canada. The references at the end of each chapter of the book have more detail if anyone wishes to gain more information on a particular topic.