History and Development of Medicinal Plants (3)
New herbal medicines:
14) **New herbal medicines:**
- There were great migrations in the 18th and 19th centuries, to North America, South America, southern Africa, or Australia, and the medicine they were familiar with at home was either unavailable or expensive.
- So European settlers had to learn more from native peoples the information about the medicinal value of indigenous plants.
- More than 170 of native plants were listed in the Pharmacopoeia of the United States.
Samuel Thomson
15) **Samuel Thomson** (1769—1843), an herbal practitioner, believed that all illness resulted from cold: His system of medicine; was an early form of naturopathy, in which ill health is treated with naturally grown food, sunlight, fresh air and natural medicines, became extraordinarily popular, with millions of people across North America following his methods.
24. **Herbalism outlawed 1850-1900:**

-In Europe, *conventional medicine was established to be the only type of practice.* in 1858, the British Parliament was asked to impose legislation **banning the practice of medicine** by anyone who had not been trained in a conventional medical school.

-In countries such as France, Spain, and Italy, and in some states of the US, it **became illegal** to practice herbal medicine without a conventional qualification.
- Herbalists were forced to risk fines or imprisonment simply for providing herbal medicine to patients who asked for their help.

- But the desire to establish herbal medicine as an alternative to conventional practices, led to the formation in 1864 of the National Institute of Medical Herbalists (NIMH) in Britain.

- NIMH was the first professional body of herbal practitioners in the world.
So, herbal practitioners had to retain their right to give safe, gentle, and effective herbal medicines to their patients.
Herbal Medicine
20th Century & Beyond

Lecture # 5

History and Development of Medicinal Plants - Rajaa Abueideh
Modern medicine is represented by drugs, such as antibiotics, and highly technical methods of diagnosis and treatment as most of us may think, but one might be surprised when knowing that for much of the last century, herbal medicines have been the primary form of treatment, even in Western countries.
As late as the 1930s, around 90 percent of medicines prescribed by doctors or sold were herbal in origin.

During World War I (1914-1918), garlic (Allium sativum) and sphagnum moss (Sphagnum spp.) were used in the battle to treat and dress wounds and infections.
Sphagnum moss
natural aseptic dressing
outdooralabama.com
- In 19th century, the development of new medicines in the laboratory started (either extracted from medicinal plants or synthesized)

- From that time on, scientists made great progress in understanding how isolated chemicals affect the body, as well as how the body works in both health and disease.
• Studying causes of infectious diseases and attempts to fight them

* From the 1860s onward, scientists (Louis Pasteur (1822-1895)) began to identify the microorganisms that were responsible for causing infectious diseases, such as tuberculosis and malaria. Those studies aimed to seek out medicines that would directly attack the microorganisms.
In the decades following World War II (1939-1945), when antibiotics first came into use, it was though that life-threatening diseases such as syphilis, pneumonia (ذات الرئة), and tuberculosis would cease to be major causes of death in the developed world.
Modern medicine also provided other highly effective drugs such as steroid anti-inflammatories, and it seemed only a question of time until cures for most illnesses were found.
Herbal medicines came to be seen by the public as outmoded and ineffective because modern chemical medicine showed effectiveness and profession in fighting life-threatening diseases, and the practice of herbal medicine was outlawed in North America and most of Europe.
18. Reasons for turn back to herbal medicine:
18) **Reasons for turn back to herbal medicine:**

1] Despite the successes of modern chemical medicines, there were also horrific disasters.

- The thalidomide tragedy in 1962 in Britain and Germany, when 3,000 deformed babies were born to mothers who had taken the drug for morning sickness during pregnancy. This event marked a turning point in the public's opinion of chemical medicines.
2] The Chinese example:
Traditional Chinese medicine (TCM) (essentially herbal medicine and acupuncture) once more began to be used alongside Western medicine.
3] The action and the experience of the World Health Organization:

Shown that traditional (usually herbal) and Western medicine can indeed work well together, but with complex relationship.
4] The high cost of Western medical treatment is another factor that has encouraged people and governments to reexamine traditional healing.

In some countries such as China, Mexico, Cuba, Egypt, herbal medicines are being cultivated in greater quantities and are being used to some degree by conventional as well as traditional practitioners.
The poor state of health in Western societies is perhaps the most important factor behind the growing interest in complementary medicine. Conventional medicine has brought serious infectious diseases under control, but there are worrying signs that infectious organisms are becoming resistant to antibiotic treatment.

Chronic illness seems to be on the increase (high blood pressure, asthma, arthritis and depression)

The significant increase in life expectancy in developed countries is starting to go into reverse, perhaps as a result of environmental pollutants and toxic accumulation within the body.
Over the years, changes in public awareness have led to a renewed interest in herbal medicine.

- Some herbal preparations are now so commonly used that they are accepted as a part of everyday life.
  * Peppermint oil (Mentha piperita), prescribed for irritable bowel syndrome and other digestive problems.
  * Senna (Cassia senna) is a simple effective treatment for short-term constipation, is one of the most frequently used medicine throughout the world.

- The growing awareness of how our lives as human beings are interwoven with the fate of our planet, reinforce the value of herbal medicines.
• Care should be taken to prevent overharvesting, herbal medicine, to ecologically protect the environment.
19. Evidence that support of herbal cures:
Evidence that support of herbal cures:

Many medical scientists still find it hard to accept that natural medicines, with their complex chemical make-up and variable constituents, can be as good as chemical cures in treating illness.
This thinking is beginning to change!

-Because, more and more research reveals that herbal medicines can be as effective as conventional medicines and are far safer.

e.g. St John's wort (اﻟﻘﻠﺐ) (Hypericum perforatum), a European plant commonly taken as an antidepressant, extracts of the herb are recognized as having value in mild to moderate depression and to have far fewer side effects. Other investigations suggest that this wort may have a role in countering viral infections, promoting wound healing and helping withdrawal from addiction, especially from alcohol.
This plant gives an example of how research has confirmed traditional views:

* So as a result of scientific research today's practitioners have an important advantage how the plant works in the body is now better understood.

* Now it is possible to be precise about dosages, aware of side effects, and confident in what form the herb should be taken as a medicine.
All over the world research is now being directed into plants with a traditional use as medicines, in the hope of finding new treatments for all manner of health problems.

e.g. Thyme (الزعتر) (Thymus vulgaris), better known as a culinary herb, is a potent antioxidant that may prevent the breakdown of essential fatty acids in the brain and slow the aging process.
Thymus vulgaris
In **India and China**, there have been university courses in herbal medicine for decades.

In the **Western** world this process has been slower. **The first undergraduate course in herbal medicine in Western Europe started at Middlesex University in London in 1994.** It was a combination of traditional herbal knowledge and the medical sciences.