

Pharmaceutical more  
plant species with  
more medicinal



**ASSIGN  
BUSTER**

Pharmaceutical compounding is the general practice of combining different kinds of medicine or specific constituents of drugs, either following doctors' specifications or for voluntary reasons. This is a practice that is very important in the pharmacy field, for it provides solutions to varying health complications. For example, the practice is very essential to individuals with certain medicinal allergic reactions or in cases where patients require specific doses, which must combine different drugs (Phillips 2010, Para. 1-2). Pharmaceutical compounding is a drug dispensing process that has existed since time memorial. That is, application of this drug dispensing technique backdates to the olden biblical days, when industry-manufactured drugs never existed.

In the past, most individuals used natural herbs as the primary remedy to health complications hence, for such herbs to work as required, doctors had to combine a number of herbs to come up with the most appropriate drug. It is important to note that, although the drug dispensing process has undergone a transformation; with current industrially manufactured drugs filling chemists, the pharmaceutical compounding process still uses plant ingredients presently (Tom, 2004, p. 1). Before the onset of modern chemistry, religion and pharmaceutical compounding were two concepts that had very close ties. However, with the birth of modern science the ever changing scientific innovations, the entire historical methods of preparing concoctions underwent a transformation, with individuals coming up with better ways of combining plant products.

In addition to improving methods of combining plant products, scientific development led to discovery of more plant species with more medicinal

<https://assignbuster.com/pharmaceutical-more-plant-species-with-more-medicinal/>

significance. One of such discoveries, which were of great significance in the compounding process, was the discovery of the therapeutic significance of coal tar. The first people to use coal tar to manufacture medicinal products were German scientist, who used it to prepare synthetic dyes. From such dyes, these scientists prepared a sulfa product, which finds wide application in modern chemistry as a remedy to skin problems.

It is important to note that, this discovery marked the onset of several scientific discoveries that were to follow later. Such discoveries included the discovery of petroleum jelly and fly larva as remedies to skin problems. Other innovations included discovery of quinine; a product of the Cinchona plant, as a remedy to malaria and opium; which had more than one functions in health (Soderlund Village Drug, 2004, p. 1) With more scientific discoveries of more herbal applications, the concept of specialization emerged, leading to the emergence of the modern chemists (pharmacists). All through the 1800's the process of pharmaceutical compounding was a sole a function of specialized individuals, a fact that led to the discovery of more medicines, for example, Laudanum (a pain remedy).

Due to these many innovations, to control the practice and ensure individuals who dispensed drugs were qualified, the government introduced medicinal education. In addition to education specifications, pharmaceutical societies emerged for example, the National Formulary and the United States of Pharmacopoeia (in 1820). As the group of pharmacist increased and with the strengthening of the United States Pharmacopoeia in 1877, these two bodies combined efforts hence, formulating the standards that all practitioners in the field were to use.

<https://assignbuster.com/pharmaceutical-more-plant-species-with-more-medicinal/>

To implement the new standards, these two bodies published written materials covering standards that all pharmacists were to use in their pharmaceutical compounding processes in publications such as the *Martindales* and the *Dispensatory of the United States of America* (Soderlund Village Drug, 2004, Para. 8-11). All through this time the drugs used were very bitter, a fact that led to more research into methods of making more pleasant tasting drugs hence, leading to development of the soda fountain; a taste enhancer that was a product of syrup and soda water. Later on Charles Hires, a Philadelphia practitioner in this field led to the discovery of herbal tea as another taste enhancer. As the industry expanded, industries compounding industries such as Squib, Merck, and Eli emerged, with different manufacturing capacities hence, leading to the birth of the modern Allopathic Medicine (Soderlund Village Drug, 2004, Para.

12-15). The onset of the industrial revolution led to more developments in the pharmaceutical industry, as such revolutions gave birth to the present existing drug manufacturing plants. Although such technological developments were important to the industry, to a larger extent they contributed to the disappearing of the compounding chemists, as better methods of preparing compounded products emerged, for example, pills. By 1900, the entire compounding process had undergone a transformation, whereby most individuals were mostly dispensers and not compounders.

This led to the introduction of compounding classes in the 1950's, whose main characteristic was extensive training on compounding techniques. Most of these changes were short-lived, because by the early 1980's, due to the effects of drug company's practices on the overall compounding process, many

<https://assignbuster.com/pharmaceutical-more-plant-species-with-more-medicinal/>

pharmacists re-adopted their olden compounding practices, a fact that is evident even in today's compounding industry. In present societies, compounding is a normal practice, although it is important to note that, the process has undergone a transformation with more innovative technologies. Common companies in the pharmaceutical industry involved in drug compounding include Paddock, PCCA, Hawkins Chemical, and Medisca. Unlike the past where the government never licensed such drugs, presently each state has specifications that chemists must use (Bettinger, 2002, p. 1). In conclusion, pharmaceutical compounding is very crucial in the modern health institutions, for it provides appropriate methods of tailoring medications to individuals with specific health complications. This is because, its concepts are very important in the medical research field in the drug development process. Other users of pharmaceutical compounding are patients with varying medicinal needs for example, patients with special drug formulation needs (for example, those who need gels or liquid drugs), patients who do not use drugs that have allergen; a case that is common with gluten coated pills, and those with specific dosage strengths needs.

In addition to human use, compounded medicine is also important in veterinary medicine, in special animal medication needs. On the other hand, common industries that use the drug compounding technology include the food supplement, beauty products, and herbal remedies industries.

## **Reference List**

Bettinger, J. (2002). History of Compounding Pharmacy.

Retrieved May 7, 2010, from <https://assignbuster.com/pharmaceutical-more-plant-species-with-more-medicinal/>