

# 19th Century Perspectives: Pharmacies, Apothecaries, and Medicines

With this new series of articles, we're hoping to shed a little light on how things were done in the 19th century. A fun way to lend perspective to our modern way of living. We often hear "You don't know how good you have it. When I was a kid..." or "You should clear your plate, there are starving kids in Cambodia/Ethiopia." So this is an attempt to add images and detail to those perspectives – without the hyperbole.

Well, maybe a little bit.

When we peer back into the past and see how things were, we come to appreciate the things we have – perhaps taking them for granted a little less or no more. Of course, I will keep this as local as possible and share any anecdotes I come across in my historical research. While no one today was alive in the 19th century, this is a series on perspectives, so by all means share YOUR story on how things were in the era that you grew up in!



*An example of  
early medical*

*treatments:  
bloodletting. A  
method that has  
been revisited  
today.  
(listverse.com)*

In a day and age where virtually everyone has a prescription and radio, TV and print is flooded with commercials and adverts for them, it's hard to imagine a time when when it *wasn't* so ubiquitous. We are clubbed over the head on a daily basis, over and again.

Before we had this monumental pharmaceutical complex called "Big Pharm," most medicine was a mixture of magic, folk remedies and placebo. As civilization and science progressed, these methods were slowly shunned an replaced by scientific empiricism – looking for objective results and performance based approvals.

Yesterday's shaman or witch doctor used teas, spells, herbs, plants, poultices, salves, and balms – even poison in small doses. Often placebo or coincidence was the real remedy for many of these cocktails of random ingredients.

However, every once in a while something wouldn't just work for a tiny few, but *really* worked and nursed an individual back to health. These would, of course, garner the attention of the healer. As cities grew and populations with them, there began to be a financial aspect to the profession that didn't exist before and the chemist, apothecary, and pharmacist would eventually become bonafide occupations.

The positive aspect of a financial boon to healing folks, was that one could make a substantial amount of money with remedies that actually worked. With this in mind, modern healers in the 17th and 18th century would begin to re-look at folk remedies that were centuries old and reconsider them – this was the precursor to today's Research & Development

departments and clinical studies.



*Early colonists in the Americas were gifted with Cinchona Bark from which Quinine was extracted and used to treat Malaria. (Nephicode)*

If you could produce a medicine that would work for “all” in a city of tens of thousands, it wouldn’t take long to spread via word-of-mouth and for one to make substantial revenue from it.

The negative aspect is that because placebo and coincidence has always played some role, one could convince people that a remedy worked when in fact it didn’t. When you factor in that many are gullible, one simply needs to make sure it is promoted and marketed to net these groups, even if the remedy did not work. Often just making an outlandish claim with lots of bells and whistles would be enough for people to open their wallets.

Seems like much hasn’t changed since the 18th century, has it? Studies, research, trials, marketing, and promotion are inseparable elements of medicine today just as they were then. Driven by profit just like yesteryear. I could rail against Big Pharm, but that would be another article for another day.

Let’s move on to some of the more fascinating aspects of historical medicine!

## Earliest Beginnings

It is always said that the very first explorers to the New World were arriving for profit, glory and gold. We are aware that they were looking for fame, recognition, "immortality," fortune, spreading the "good" word, natural resources, etc. Often left out are the minor reasons for taking such a perilous journey across the Atlantic, one of those being the discovery of new herbs and plants for medicinal uses.

Tobacco stole the limelight and all the headlines in this department, but if you dig a little you'll find that plenty of profit was made with Sassafras, Jesuit's Bark from which quinine was extracted to treat Malaria, Guaiacum, and Peru balsam, amongst others.

By the 17th century more than 200 medicinal plants and herbs were uncovered from the New World. Most of these, like the ones mentioned above, were beneficial and either improved quality of life for those that used them, sped up the process of recovery or even provided a cure altogether. However, there were plenty that were disastrous and many had their ailments worsened or many actually died because of the "medicines."



*Engraving from William Lewis's book *Commercium Philosophico-Technicum*, circa 1764, showing an 18th-century chemical laboratory.*

By the 18th century there were many trying to crack into the profits. Since there hadn't yet been a wealth of accumulated knowledge there was a lot of experimentation and since no one wanted to share these profits, no one shared the remedies that really worked. In fact, if you were looking for healing you had to choose which type of healer to go to: chemist, apothecary, herbalist, homeopath, local shaman, family folk remedy.

The earliest modern equivalent of a pharmacist was the Apothecary, which has been around since at least 3,000 years BCE. Most cities in the Old World had an Apothecary – a healer who would not only provide you with remedies for ailments, but supply you with perfumes, refreshments, cosmetics or even general supplies. Sound familiar? That name brand pharmacy store is not a new idea!

#### **Odd, unusual and often disgusting concoctions and methods of treatment**

In the earliest days of medicines and treatment of ailments, some rather unusual beliefs and scientific ignorance lead to even stranger treatments. Some were steeped in ancient folk remedies or misunderstandings. The mere mention of ancient or medieval doctors usually conjures up images of leeches for bloodletting, trepanation (drilling into the skull), amputation of limbs without anesthesia, electric shock therapy or cocaine.

Many vintage photos depict a variety of colored leech jars, Posset pots, medicine spoons, and adverts for cocaine. Yes, cocaine was once one of the ingredients for Coca-Cola – it's not an urban legend. However, a disclaimer: many medicinal products carried cocaine back then and in the case of Coca-Cola it was in such a small amount that it barely merits mentioning. Bayer and many other companies would even put heroin in their medicines for coughs. One "Dr. Batty" even sold Asthma Cigarettes "For your health...and the temporary relief of paroxysms of asthma." Seems his surname was a fitting one.

In an attempt to see if anything would turn out a result, it seemed chemist, druggists, apothecaries and their ilk would place anything in their medicines in a desperate attempt to strike gold. Bone ground into powder, mercury, animal fat, arsenic, lead, dung, mold, urine and so on. It seemed there was nothing that shouldn't be considered. Ironically, in the right dosages some of these "silly" ingredients actually DID treat ailments.

Some of the more notable casualties of these odd treatments were George Washington whose bloodletting contributed to his death (40% of his blood was sucked out of him), Abraham Lincoln who spent his last days suffering with mercury poisoning which would likely have eventually taken his life as it likely did with author of Little Women, Louisa May Alcott, and Napoleon Bonaparte – who may or may not have been killed by the combination of arsenic and potassium tartrate used to induce vomiting, but caused a deadly potassium deficiency.

### **The first pharmacists**

The pharmacist title came about with the advent of the very first license to be handed out in the New World, New Orleans to be exact. In 1769 Louisiana was considered "Franco-Spanish" as opposed to much of the nation which was British occupied and controlled. The Jesuits coming from the France and Spain to the New World made a concerted effort to improve the Old World system with some of the new plants and herbs utilized in local Amerindian folk applications.



*Some rather unusual ingredients were included in yesteryear's*

As is typical of the first centuries here, Spain, France and England competed in everything. They tried to best one another in every rung of society. The reason that the British apothecaries weren't quick to throw their hats into the pharmacist "ring" was because of their more skeptical nature and scientific lean.

After the Revolutionary war, defining regions as New France, New Spain or British controlled, began to thin. Things were thought of as "American" after the war and Americans would finally enter the world of pharmacy and do so with in a big way. In March of 1821, sixty-eight apothecaries assembled in Carpenter's Hall – the same place the Declaration of Independence was signed – and set up the Constitution of the first pharmaceutical association in the United States: the Philadelphia College of Pharmacy. The profession was not only born, but regulated, defined a strict code of ethics, and medicines were standardized.

The "father" of American pharmacy was William Procter, Jr. who was not only a graduate of the Philadelphia College of Pharmacy, but one who stayed on and taught there for more than two decades from 1846–1874. Without him there would be no American Pharmaceutical Association – he was instrumental in its founding, before becoming an officer, secretary and eventually president of the organization. He also wrote the very first, definitive textbook on the subject in 1844 called *Mohr, Redwood, and Procter's Practical Pharmacy*.

### **Growth of the Profession; The Industrial Revolution; Conclusion**

In the decades that followed, Pharmacy schools would crop up around the nation, particularly in Boston and New York. As doctors began to gravitate and focus on pharmaceuticals, pharmacy gained legitimacy as a practice and the two began to merge. In the 1880s, pills, capsules and tablets became the preferred vehicle for medicines. These were not only

easier to take – many medicines were downright disgusting to take – but easier to produce, package and ship.



*Chemists like this one in Manhattan offered medicine...and food, supplies, coffee and more. (Library of Congress)*

When the Industrial Revolution arrived in America, mass production launched what would become “Big Pharm” by making it possible to produce enough medicine to surpass demand as well as be circulated far and wide – increasing revenue.

It seems both, that little and a lot, has changed in the pharmaceutical world. While today’s pharmacies mirror yesterdays in offering general supplies, refreshments, coffee, and many other unrelated goods, there are many ways that it has changed. We have stricter standards when it comes to the creation of new medicines, they undergo extensive and rigorous testing, and if taken as prescribed, much, much safer. Lastly, there is more culpability and liability involved with meting out drugs to the general populace.

Unfortunately, it can’t be said that they are without dangers. There is rarely an advert on TV where there isn’t a disclaimer for the many side effects that can result from taking the medication, including death. To be fair, this disclaimer is a bit hyperbolic in the sense that they have to mention each side effect reported during clinical regardless of its



frequency, whether it was actually a result of the medicine itself, or there is a bit of placebo or coincidence.

Often people will attribute an ailment to something even if there is no real connection to it, in the same way that when you buy a particular brand of car, you begin to notice that brand more often. Or when you begin to take a medicine you hyper-focus on every single sensation and attribute it to the medicine.

The future of medicine is looking towards stem cell research, nanotechnology, gene therapy and manipulation and lab grown organs. When these things become prevalent, people will look less and less to drugs and medicines for ailments. Though there will always be hoaxers, charlatans and profiteers hawking their wares and promises...because there will always be a gullible mass to buy into them – literally and figuratively.

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