A Prescription for Deceit: Pharmaceutical Frauds’ Dangerous Side Effects

Calvin McMurtrey
Denison University

Follow this and additional works at: https://digitalcommons.denison.edu/synapse

Part of the Life Sciences Commons, and the Physical Sciences and Mathematics Commons

Recommended Citation
Available at: https://digitalcommons.denison.edu/synapse/vol37/iss1/1

This Article is brought to you for free and open access by Denison Digital Commons. It has been accepted for inclusion in The Synapse: Intercollegiate science magazine by an authorized editor of Denison Digital Commons.
With anti-vaccine sentiment at an all-time high and many people claiming wild stories about companies hiding cures for diseases like cancer, it can be easy to dismiss this mistrust as a ridiculous conspiracy. However, pharmaceutical fraud has been unfortunately commonplace, and it is essential to examine these cases to remember how many have been affected by these companies and understand how the public could mistrust this industry.

One of the most shocking cases of pharmaceutical malpractice causing large amounts of harm to people focuses on the drug Thalidomide. In 1956, Thalidomide was approved for over-the-counter sale in Germany following animal testing with no significant side effects. The drug was recommended for sickness symptoms, such as nausea and vomiting. Crucially, it was explicitly marketed for morning sickness in pregnant women despite no prior testing on pregnant women. Despite the drug being used across Europe, it was rejected in the United States as Dr. Frances Kelsey expressed serious concern about the lack of evidence showing it was safe in pregnancy and caused no peripheral nerve damage. Despite the lack of safety testing that led to this decision, German pharmaceutical company Grünenthal insisted on its approval. Six times, they repeatedly requested approval from the U.S. Food and Drug Administration (FDA), which was rejected every time.

In 1961, evidence began to surface about Thalidomide Horrifying congenital disabilities. The babies’ limbs were severely deformed, and many growing fetuses had malformed organs, causing them to be stillborn or die shortly after birth. As many as 100,000 pregnancies were said to be affected by Thalidomide. Despite this, formal warnings about the medication were not heavily publicized, so many who purchased it a while ago would still use it after it was recalled from shelves, further prolonging the crisis. Throughout the story of this scandal, Grünenthal never took clear steps to rectify their mistakes, such as taking action to warn the public about the dangers of the drug as the stories of horrible pregnancy side effects began to emerge. A formal apology from the company was not published until 2012, long after most victims had passed away.

As many as 100,000 pregnancies were said to be affected by Thalidomide.

Despite the public and FDA learning a great deal from this disaster, incorrect approval of drugs continues to be a problem, often spearheaded by companies looking out for their bottom line rather than the safety of their customers. In May 1999, the FDA approved a new nonsteroidal anti-inflammatory drug. Advertised as a new treatment for chronic pain, arthritis, and migraines by Merck, one of the largest pharmaceutical companies, Vioxx was an instant commercial success as millions of people were prescribed this drug for a wide variety of conditions. However, the cracks almost immediately began to form around this drug. By 2002, studies warned about Vioxx putting people at risk for severe heart problems. In 2006, the drug was voluntarily taken off the market by Merck. Later research published by Lancet, a peer-reviewed medical journal, proposed that almost 88,000 Americans had heart attacks directly due to taking Vioxx. In less than a decade, Vioxx had been approved, contributed to tens of thousands of deaths, and then subsequently taken off the market.

People immediately began to question how this was possible due to the typically rigorous standards medication studies are held to. It turned out that the answer to this question was Merck’s negligence and alleged purposeful exploitation of the approval process. Merck, when seeking approval, was halted after a study showed a doubled increase in the risk of heart attacks on this medication. Wanting to get the drug out quickly, Merck approached the head of the Data and Safety Monitoring Board (DSMB), an independent board tasked with reviewing drug trials. Within a month of this meeting, the chairman was given a consulting role at $5,000 daily and disclosed he owned $70,000 in Merck stock simultaneously. While there is no direct proof of this, including the eventual approval of the drug or his opinion on the trial, suspicious conflicts of interest can significantly impact the eventual approval of a harmful drug.

While there is no direct proof of this, including the eventual approval of the drug or his opinion on the trial, suspicious conflicts of interest can significantly impact the eventual approval of a harmful drug.

The ripple effects of pharmaceutical companies’ negligence are unquestionably still present today. From the harmful effects of improperly testing medications to the considerable distrust many people have in medications and the medical field, it is challenging to quantify the large influence that unethical and fraudulent behaviors have had on the health and safety of the public. Not only are the people who took these medications harmed, but also people who mistrust medicine due to these incidents. When companies push medications that have not been properly tested, it becomes more difficult for doctors and other medical professionals to justify safe and effective treatments. As medicine continues to advance, there must be a continued emphasis on preventing the profit incentive of companies from affecting the health and safety of patients and their trust in medicine.
A Prescription for Deceit
Pharmaceutical Frauds’ Dangerous Side Effects

Written by Calvin McMurtrey
Illustrated by Patrick Estell