

## Video #4 – Drug Therapy Script

You could argue that drugs have always been a part of mental health care. People have experimented with different sedatives and stimulants throughout history – including nerve tonics, alcohol, cocaine, morphine, and laudanum. But it was the discovery in 1951 of the first antipsychotic medication that truly ushered in the “drug era” of mental health care.

I’m John Leclair and this is “Keys to Our Past.” Please join me on this voyage of discovery as we explore the history of mental health care in Canada, through the drugs we use to treat and understand it.

Hello, welcome to my study. In December of 1951, while searching for new anti-histamines, a pharmaceutical company in France first synthesized chlorpromazine. Within a few months, a group of French army doctors started to realize the potential psychiatric benefits. Clinical investigations began soon after with the results being a calming effect on even the most agitated patients. Within three years of its discovery, chlorpromazine had transformed mental health care around the world.

Chlorpromazine entered mental health hospitals at a time when therapies were time consuming and labour intensive. Shock therapies and leucotomies required many hours and several staff members to administer. Part of the appeal of the new drug was that it didn’t require much time or effort to distribute; it was also considered to be less dangerous than the other therapies. Of course, chlorpromazine was not without its side effects – it caused patients to be drowsy, created movement problems, and resulted in unhealthy weight gain.

The first English publication on the effects of chlorpromazine came from Heinz Lehmann, a German emigrant at the Verdun Protestant Hospital in Montreal, Quebec. In 1953, Lehmann and a colleague found that chlorpromazine suppressed both hallucinations and delusions among their participants. This was a revolutionary development for the treatment of schizophrenia, and the popularity of chlorpromazine quickly spread.

The introduction of this revolutionary new medication ushered in an era of increased experimentation and development of new drugs – including more antipsychotic, antidepressant, and anti-anxiety medications. But these mainstream drugs were not the first to be experimented with in mental health care.

In 1938, the Swiss biochemist Albert Hoffman synthesized, for the first time, d-Lysergic acid diethylamide – or LSD. He had been working on a cure for migraines when he accidentally ingested the new drug. In a now famous event, Hoffman later described the hallucinations that coloured his trip home that day.

Fourteen years later, Humphry Osmond received a sample of LSD at the Saskatchewan Hospital in Weyburn. Working with biochemist Abram Hoffer out of Regina, the two believed that LSD would be

a way to understand the hallucinations experienced by those diagnosed with schizophrenia. With funding from the Saskatchewan government, Osmond and Hoffer began distributing LSD to volunteer nurses and physicians. The aim was to experience schizophrenia in order to understand it.

This was not Osmond's first foray into hallucinogenic drugs in his psychiatric research. He was first exposed to the properties of mescaline while working in England. He continued those studies at Weyburn, alongside the more famous LSD studies, having found that they produced similar physiological and psychological effects.

But instead of offering secret insights into the experience of schizophrenia, Osmond and Hoffer noticed that the effects of LSD were closer to a kind of delirium often experienced by alcoholics who are in withdrawal. The Saskatchewan researchers then changed their focus to the use of LSD as a treatment for alcoholism. Other sites around Canada also began to experiment with LSD during this period, including the Mental Health Centre Penetanguishene, who hoped to use LSD to help psychopaths gain insight into their own emotions.

Unlike the success of chlorpromazine, LSD soon faced a lot of bad press. Osmond, Hoffer, and other psychedelic researchers were caught in the middle. Their expertise was called on to defend the use of hallucinogens in multiple contexts. In the mid-1950s, for instance, they were invited to a peyote ceremony by the Native American Church of North America on the West Coast. The hope was that the researchers could use their science to prove to the government that the traditional peyote ceremony was safe and should be allowed to continue. Osmond and his team were quite positive about the research benefits, as well as the healing and spiritual aspects of these substances. Yet, as one Weyburn psychologist – Duncan Blewett – commented on peyote: “[it was] too White for many Indians, and too Indian for the Whites. By its powerful enemies it is called a Peyote ‘habit,’ an addiction, and orgy, and it doesn't seem to matter that scientists have proven otherwise while its opponents have never attended or participated in a ceremony.” In the end, Hoffer and Osmond would lose that battle, in the same way that they would later lose the battle to pursue psychedelic research.

In a series of articles, the Addictions Research Foundation in Toronto argued that no controls were being used in the hallucinogenic studies. Their own attempts at replications failed, which raised further doubts on the successful use of LSD. Combined with the negative association of the hippie counterculture and CIA-funded experiments on ‘mind control’, the potential inroads made by psychedelic drugs within mental health was put on hold. In 1968, LSD was made illegal in both Canada and the United States.

In the past few years we have been seeing a renewed interest in the use of psychedelic drugs, including mescaline, mushrooms, MDMA, and LSD for the treatment of chronic pain, addictions, and PTSD. However, these studies are preliminary, and are steeped in the same debates that were first seen in the 1950s and 1960s.

To sum up our discussion in the study, I'd love for you to take away these three key points. Number one, drugs have long been used to both treat and understand mental illness; number two, the drug era was ushered in by the discovery of chlorpromazine; and three, what is considered an acceptable drug for treatment goes in and out of fashion. Thanks for visiting my study, join me next time on "Keys to our Past" as we continue our discussion of the history of mental health care in Canada.