

### Video #3 – Somatic Therapy Script

The connection between the mind and the body had long been theorized, but how did we come to the idea that actual changes to the body could bring about a lasting change in mental state? In the nineteenth century, mental health treatment was all about the environment around us; in the twentieth century, it was all about the body.

I'm John Leclair and this is "Keys to Our Past". Please join me on this voyage of discovery as we explore Canada's mental health history through different mind-body connections.

Hello, welcome to my study. The idea of a mind-body connection did not come out of the blue. For decades, post-mortem examinations had been used to search for the "site" of insanity – a tumor or defect that might explain why someone was ill. There were also clues, like the observation that those with epilepsy never seemed to be affected by schizophrenia, and vice versa. And then there were the unexplained mental recoveries witnessed after a person suffered from an infectious disease, like typhoid, cholera, or malaria.

The cure of General Paralysis of the Insane, or GPI, is a perfect example of this transition. It was first identified as a form of insanity in the 1820s. Depression was often one of the earliest symptoms, with decreasing mental and physical functioning that eventually resulted in death. It had been supposed since the mid-1800s that syphilis was the cause of GPI but it took until the early twentieth century for the link to be proven.

If left untreated, the bacteria that causes syphilis spreads quickly throughout the body, affecting both the nervous system and the brain. But researchers soon noticed that the bacteria would die off when exposed to temperatures above 40 degrees Celsius – that's 105 degrees Fahrenheit for the imperially minded among you.

The Austrian psychiatrist, Julius Wagner von Jauregg, is credited with officially developing a therapy that would later prove to stop the progression of syphilis, leading to the elimination of GPI. He gave infected patients malaria in order to raise their fevers high enough to kill the syphilis bacteria and then treated the malaria with quinine. Malaria Fever Therapy became popular throughout the 1920s and 1930s. Wagner von Jauregg was awarded the Nobel Prize in Medicine and Physiology for his work.

We can imagine the sense of hope among mental health professionals with a success like that. This was the first time that a mental illness had been ever cured. If one mental illness could be cured by creating a drastic effect on the body, perhaps others could as well? The era of somatic therapy – which literally means "treatment upon the body" – followed this theme.

The shock therapies were among the more prominent treatments proposed during this period. These included insulin shock therapy, metrazol therapy, and electroshock therapy. They each have their own unique story of development but are often lumped together when we look back in history.

In Ontario, insulin shock therapy was first trialed at the Ontario Hospital, New Toronto before the program was spread to the other hospitals in the province. As part of this therapy, patients were given enough insulin to put them into a coma. In Ontario, the initial dose was given on May 31, 1937. Twelve women with a diagnosis of schizophrenia formed the trial – six received the full course of the insulin treatment while the remaining six acted as experimental controls.

One of Canada's more prominent contributions to the somatic therapy era was through the work of Dr. Kenneth McKenzie, who modified an existing tool and treatment technique for altering the brain through psychosurgery. On July 23, 1941, McKenzie, who was from Hamilton, performed the first leucotomy in Ontario on a 48-year-old female patient from New Toronto in the surgical ward at the Toronto Psychiatric Hospital. The procedure was performed by cutting a hole in the side of the skull and inserting a leucotome. A plunger on the instrument was then depressed which would cause two wires to protrude and cut into the brain. The procedure was influenced both by the development of the leucotomy in Portugal by the neurosurgeon Egas Moniz as well as the work in the United States on the lobotomy by Walter Freeman and James Watts.

While the somatic therapy era could be said to have ended with the beginning of drug therapies in the 1950s, variations of these treatments still remain a part of mental health care today. Electroconvulsive therapy is probably the best known of these, although it looks quite different from its electroshock origins. And while leucotomies were halted around the 1960s, we still probe the brain in different ways in order to treat those afflicted with the most severe mental illnesses.

To sum up our discussion in the study, I'd love for you to take away these three key points. Number one, somatic therapies were those treatments that focused on how affecting the body could affect one's mental state; two, the success of fever therapies helped to turn the focus of mental health towards physical treatments; and three, the roots of somatic therapies can still be seen in several contemporary treatment programs. 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.