

HEINZ LEHMANN AND DOUGLAS HOSPITAL

For over 61 years – it must be some sort of record – Heinz Lehmann was an active member of the medical staff of Douglas Hospital. In 1937 Heinz Lehmann had left Germany, his country of birth, because as a 26 years old doctor under Nazi law he was a "non-Aryan" and had no future in Germany.

Psychiatry, his chosen medical specialty, was in a period of relative stagnation. Mental hospitals were becoming more and more overcrowded with both acutely and chronically mentally ill patients. Psychiatrists were still often called "alienists", as if they were strangers in the field of medicine.

Faced with about 600 patients when Heinz first started working at Verdun Protestant Hospital (VPH) – the name of the hospital before it was changed to Douglas Hospital in 1965 - he felt that he had to look for and find new treatments that would improve the patients' conditions.

The few medical colleagues he had at the hospital had been overwhelmed with clinical and administrative tasks necessary to keep the hospital functioning, a situation that, bad as it was, became worse during the war years and after, i.e. 1939 to 1953. These colleagues, notably Drs. Carlyle Porteous, George Reed, Travis Dancey, Karl Stern and Clifford Skitch, had still found time to apply some new treatments that had been introduced in Europe, such as Metrazol, Insulin, and electric shock therapy (1, 2, 3).

But all this time Heinz Lehmann's mind went beyond the conventional. Although he had some interest in depth psychology and psychoanalysis he did not see how the kinds of patients at the VPH could benefit from Freud and Jung. Biochemical approaches seemed more promising.

Few psychiatric drugs were available at that time – mostly vitamins and sedatives; among the latter were barbiturates, chloral hydrate, paraldehyde, and injections of hyoscine and apomorphine ("H and A") for calming the most excited patients.

A bit later came the amphetamines, supposedly good stimulants, but all these drugs had limited actions and at times untoward side effects.

Heinz Lehmann never stopped thinking about what new and original procedures could be developed. One was the use of the anaesthetic nitrous oxide (also known as "laughing gas", used by dentists to make tooth extraction more tolerable). Selected patients were asked to inhale the gas for about two minutes until they became unconscious and cyanosed, then allowed to recover. Afterwards many patients felt quite relaxed and they slept well that night, but the treatment had no lasting effect (4).

In 1947 Heinz was appointed Clinical Director of the VPH. He had begun to acquire a very good reputation not only as a clinician but also as a teacher and researcher.

In the Faculty of Medicine of McGill University psychiatry was at last being recognized as a medical specialty in which undergraduate and postgraduate students should receive instruction.

In 1943 Dr. Ewen Cameron became professor and chairman of the McGill Department of Psychiatry, with headquarters at the Allan Memorial Institute (AMI), situated in close proximity to the Royal Victoria Hospital, the main teaching hospital of McGill.

The VPH was located some 10 km from the McGill campus, but that did not deter medical students from attending lectures and demonstrations of patients conducted by Heinz Lehmann and associates.

At McGill a diploma course in psychiatry was established by Dr. Cameron, which over the years attracted postgraduate students from all over the world (5). Residents in psychiatry rotated through the McGill University affiliated teaching hospitals. One year, 1970-71, the Douglas Hospital (DH) had 21 residents in psychiatry.

Heinz Lehmann was never attracted to join the staff of the AMI. The scope for research at the VPH was much greater. The two psychiatrists who were his seniors, medical superintendent George Reed and assistant medical superintendent Clifford Skitch, always encouraged him to do whatever he thought was best for the patients and the hospital. Given such a free hand he started many new projects. I will name just a few of them :

1. He set up a psychophysiological laboratory, for measuring reaction times, critical flicker fusion, negative afterimages and various other procedures to test the functioning of the nervous system under different conditions (7).
2. With psychologist Herbert Dorken he developed the ``Verdun Projective Battery`` of psychological tests, the results of which helped to diagnose the mental disorder qualitatively and quantitatively (6).
3. With occupational therapist Mary Caton he devised a procedure for following the progress of treatment by means of scoring patients' finger paintings (8).
4. After I had joined the staff of the VPH in 1951 he suggested to me to conduct an experiment on the use of drugs in group therapy (9).
5. The so-called ``East House Project`` : Six female patients with schizophrenic deterioration were given a concentrated program of progressive group activities based on psychodynamic principles; the patients became much more socialized while the project lasted. A film was made of the project, again on Heinz Lehmann's instigation.
6. The use of films for educational purposes was greatly encouraged and promoted by Heinz Lehmann, with private film makers and the National Film Board of Canada producing these films. The subjects of the films were anxiety, hostility, depression, and schizophrenia.
7. East House, referred to above, in the 1940s and 50s was a building in which about 100 of the hospital's most regressed female patients were kept. Heinz Lehmann managed to make the snakepit-like conditions beneficial for some younger noisy female patients with severe and provocative behaviour problems. A few of these patients were transferred to East House where they could scream and shout, but where nobody paid attention to them, so they gradually calmed down. Heinz Lehmann called that an ``anhomiletic milieu``.

Now I am coming to the most important contribution made by Heinz at Douglas Hospital, i.e. in the field of psychopharmacology. One of his most remarkable characteristics was the fact that he not only spoke three languages fluently, but he also read much of the European literature published in the three languages : German (his mother tongue), French (his wife's mother tongue), and English (the language spoken daily at DH).

The first big breakthrough was chlorpromazine (Largactil), which came from France in 1953, the second was imipramine (Tofranil), which came from German-speaking Switzerland in 1958. With both these drugs Heinz lost no time in obtaining samples from the manufacturers and in using them in the treatment of psychotic and depressed patients respectively, with many very good results, as is now well known (10,11).

Representatives from a number of drug companies had made frequent contact with Heinz, providing him with samples of various new drugs to try out on the hospital's patients. Most were not effective or even quite ineffective, but when the representative of Rhone-Poulenc produced `Largactil`, the situation changed

dramatically. For the first time there was a drug that was unlike the previous sedatives, but it actually combined a tranquilizing with an antipsychotic effect, diminishing or even abolishing delusions and hallucinations (10).

The pharmaceutical companies' research and development departments went into high gear, and synthesized many new antipsychotic and antidepressant drugs. Heinz Lehmann was often asked to try these out. At first all his research was done on a "shoestring", using, as he stated, "no written protocol, no stated criteria for selecting the patients, no placebo or other controls, no government permission, and, it seems incredible today, no informed consent from the patients or their families (who were usually quite happy about the treatment), and it all without financial assistance or government grants". Medical ethics was based solely on the researcher's conscience, his integrity, and the Hippocratic oath. "Since then a new research methodology has been devised which has grown into considerable complexity, with sophisticated statistical evaluations".

The second phenothiazine derivative to be evaluated was perphenazine (Trilafon). I was closely associated with Heinz, assisting him in writing the paper for publication (12). Later, Roger DeVerteuil and I collaborated with him in the evaluation of imipramine (Tofranil), the first tricyclic antidepressant (11).

Most of us Douglas Hospital doctors during those years were living on the hospital grounds. Walking from his house to his office, Heinz crossed a grassy field, on which hundreds of dandelions grew. He picked up some and placed them in glasses of water. To each glass he added a different drug: secobarbital, a barbiturate sedative; chlorpromazine, the first of the new phenothiazine derivative; prochlorperazine, another antipsychotic phenothiazine; LSD, a hallucinogenic; dextroamphetamine, an amphetamine; and imipramine, the new antidepressant. The next day, under the influence of secobarbital, the petals of the dandelions remained tightly closed; the petals in the chlorpromazine and the imipramine solutions opened slightly; the ones in the prochlorperazine solution were normally open as were the controls and the LSD ones; but the ones in the dextroamphetamine solution were open more widely than the normals. It confirmed that chlorpromazine was unlike the barbiturates and that some of the phenothiazine derivatives such as prochlorperazine had an even lesser sedating effect than chlorpromazine (13).

In 1958 Thomas Ban came from Hungary to Canada, then soon became a very active member of the VPH medical staff. His great interest, especially in the fast expanding field of psychopharmacology, led to a very close cooperation with Heinz Lehmann. For over 8 years they spent thousands of hours doing research at the hospital, evaluating the effect of many new antipsychotic and antidepressant drugs. After Thomas Ban left in 1972 their collaboration continued, and altogether they published well over 200 papers in the scientific literature.

Heinz Lehmann's fame began to spread abroad, at first in USA (Cincinnati, Washington, New York), then in Europe and elsewhere. In Canada he was a member of the Ledain Commission on the non-medical use of drugs. From 1971 to 1974 he was chairman of the Department of Psychiatry of McGill University, but although he had an office at the AMI he continued to spend most of his time at DH, as director of medical education and research.

In March 1981, largely due to the combined efforts of Gaston Harnois, the DH director general, and Heinz Lehmann, now the new director of the DH Research Centre, the hospital became a World Health Organization Collaborating Centre for Research and Training in Mental Health.

But by no means it was all drugs. As a compassionate human being, Heinz Lehmann took it upon himself to go with his son to the hospital every Christmas Day for all the years he was at DH, wishing 'Merry Christmas' to all the patients in the hospital and the staff on duty that day, with what someone called 'the golden handshake'. With a pedometer he took with him once, he counted 8 miles of walking! Some of us followed in his footsteps and tried to do the same. Santa Claus had been around giving out presents donated by the hospital auxiliary. Some patients' hands had become quite sticky, and I remember that once I had to wash my hands 4 times before I was through. In later years there were fewer patients in the hospital; many had permission to spend Christmas with their families, so eventually it did not take so long any more.

Many people have interviewed Heinz Lehmann over the years. I did one in 1991 which was filmed for the Canadian Psychiatric Association. Another was published in the 'Medical Post' in March 1995. A couple of passages from this article, regarding psychopharmacology and the rest of psychiatry, are worth quoting: 'Too many psychiatrists today opt for an easy course of treatment - a 'cookbook' approach through drug therapy...it is much easier and they don't have to think'. 'To some people it almost seems old-fashioned to listen to the patient. I hope that what appears antiquated will make a comeback'.

Heinz Lehmann was a very good listener, but he was also very good at logical arguing. When someone did not agree with him he nearly always succeeded in having the last word, convincing the other person that what he had said was correct. He did this amicably and patiently, without a trace of domineering. It was always a pleasure to converse with him.

Heinz won many awards in his life time, which I will not repeat mentioning here. His last professional activity at DH was teaching medical students psychiatric interviewing techniques. This he did for at least 20 years, right up to March 1999.

On April 7, 1999 Heinz Lehmann died at the age of 87 years. May tributes were paid to him by word of mouth and in writing. An 'In Memoriam' Day was held for him at Douglas Hospital on October 22, 1999, at which the Bowerman Room was filled to overflowing. A film entitled 'Untangling the Mind' was produced by Green Lion Productions and shown on the Discovery Channel on January 7, 2000. It pieced together Heinz Lehmann's service of over 60 years at DH, thereby paralleling the evolution of psychiatry in the 20th century. He truly was a psychiatrist 'for all seasons'.

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