

Lobotomy in Scandinavian Psychiatry

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This article surveys the development of the use of lobotomy in Scandinavian psychiatry. Scandinavian hospitals lobotomized 2.5 times as many people per capita as hospitals in the United States from 1941 to 1960. The use of lobotomy in Scandinavia is chiefly illustrated by detailed patient records from Gaustad Mental Hospital in Oslo, Norway, where the most lobotomies were performed. Overcrowding and understaffing in mental hospitals cannot explain the extensive use of lobotomy in Scandinavia since the frequency of operations did not correlate with these factors. Neither can ignorance of damaging effects be used as a justification since such effects were discussed very early in the development of the surgery. Finally, the patient's own suffering did not seem to be a significant factor. Rather, lobotomy seems to have been primarily a way of controlling troublesome patients and minimizing their disruptions of medical, nursing and hospital routines.

Psychosurgical operations ceased in Norway in 1974 at the earliest. This method of treatment is a hidden chapter in the history of Norwegian psychiatry. N. Retterstøl, one of the leaders of Norwegian psychiatry, calls it “a parenthesis among methods of psychiatric treatment” (Astrup, Dahl, and Retterstøl, 1980, p. 14).

Scandinavian psychiatry — similar to psychiatry elsewhere in the western world — from the early 1930s to the 1950s evolved from the most “isolated” of medical specialties to a respected branch of modern medicine (Pressman, 1986, p. 1). Much of this development may be traced to the introduction of “breakthrough” somatic treatment methods such as insulin coma, cardiazol coma, electroshock and lobotomy. Troublesome wards in insane asylums

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became calmer and lengths of hospitalizations were reduced. Psychiatrists gained more prestige. Their growing public status and representation in medical literature led to greater influence within the field of medicine.

During this period western psychiatry also suffered from a general crisis evidenced by hospital overcrowding and shortage of ward staff (Valenstein, 1986, pp. 174–177). In the present article, the development of lobotomy in Scandinavian psychiatry is viewed in relationship to the growing prestige of psychiatrists and the hospital conditions of the day. This relationship is illustrated chiefly by description and analysis of selected events which occurred at Gaustad Mental Hospital in Oslo, Norway. Gaustad performed lobotomies earlier and in greater numbers than any other institution in Scandinavia.

In absolute terms, psychosurgery was most prevalent in the United States, with approximately 40,000 persons lobotomized, followed by Great Britain with approximately 17,000 and the three Scandinavian countries (Denmark, Norway, Sweden) with a combined figure of approximately 9,300 (Pressman, 1986; Tooth and Newton, 1961; Tranøy, 1992; Valenstein, 1986).¹ However, in relation to the size of the population, Scandinavia tops the list with 2.5 times more lobotomies per capita than the United States.

Sources

The documents on which this article is based include (1) almost all of the annual reports of Norwegian and Swedish mental hospitals during the period 1941–1960; (2) all of the annual reports of Danish hospital neurosurgical departments during the period 1944–1960²; (3) notes and reports in Scandinavian medical periodicals such as *Svenska Läkartidningen*, *Ugeskrift for Læger*, *Tidsskrift for den Norske Lægeforening*, *Nordisk Medicin* and *Nordisk*

¹The number of lobotomies performed in Scandinavia is an estimate based on figures obtained from several different sources. There is some discrepancy between these sources. See ahead for estimates for each country. For Norway the total number is based primarily on the annual reports of various mental hospitals placed in the files of the National Bureau of Statistics (Tranøy, 1990, 1992). However, these files are not complete. The missing information has been gleaned from new lists issued by the various mental hospitals (1989 and 1990) and from annual reports placed in the Norwegian National Archive in Oslo (Tranøy, 1990, 1992). For Sweden the total number is based primarily on the annual reports of mental hospitals placed in the National Health Authority Archive in Stockholm (Tranøy, 1992). As in Norway, a few reports are missing. The missing information has been gleaned from data contained in Swedish medical periodicals (Tranøy, 1992). For Denmark the total number is based on data received from four hospital neurosurgical departments (Tranøy, 1992).

²Reports from the various Danish neurosurgical wards were received by mail from the heads of the respective wards and supplemented by information obtained during a visit to the Danish National Health Authority Archive in Copenhagen on July 13, 1990 (Tranøy, 1992). Reports from Swedish mental hospitals were collected during a visit to the Swedish National Health Authority Archive on June 6, 1991 (Tranøy, 1992).

Psykiatrisk Medlemsblad; and (4) the medical records of 174 patients who were lobotomized between 1941 and 1952 at Gaustad.

Access to patient records at Gaustad was given to the author in connection with research for a Ph.D dissertation on the role of lobotomy in Norwegian psychiatry. The publication of occasional, anonymous material from these records resulted in the denial of further access. At that point the examination of the medical records of only 174 lobotomized patients had been completed. Figures from the hospital's annual reports on file with the Norwegian National Bureau of Statistics show that a total of 292 persons were lobotomized there between 1941 and 1952. Recently, the hospital has claimed that only 220 persons were lobotomized during this period (Tranøy, 1990).

The sample from patient records at Gaustad was randomly selected and can be taken to represent the lobotomized patient population of this hospital, but not necessarily the population of lobotomized patients in Scandinavian mental hospitals overall. The "indication period" (the time between a patient's admission and the carrying out of a lobotomy) was much shorter at Gaustad than at other Scandinavian psychiatric institutions (Tranøy, 1992). The average indication period at Gaustad in the period 1947–1950 was 3.7 years.³ During the same years the two Swedish hospitals which lobotomized the most patients, Lillhagen Hospital in Göteborg and Vadstena Hospital in Malmö, showed an average indication of 7.5 and 9 years, respectively (Foltmann, 1953, p. 1449; Kryger, 1953, p. 849). The sample from Gaustad may also slightly under-represent women. Women comprised 47.8% of our Gaustad sample of 174 cases, although Oslo Social Department records indicate that 48.6% of the patients lobotomized at Gaustad in the period 1941 to 1965 were women (Christensen et al., 1992, p. 50).

Gaustad's medical records give detailed descriptions of treatments patients received and frequently include letters written by patients but confiscated by the staff. The records are disciplined, extensive and systematic. The patient's behavior, including degree of sociability, submissiveness, rebelliousness, or contentiousness, is described in detail. The completeness of this archival material was likely due to the influence of Ørnulv Ødegård, Gaustad's managing director and chief psychiatrist for many years, who established a central register of "psychotic" patients at the hospital.

³This average indication period is based on 84 patient records. The average indication period during the years 1941–1947 when lobotomy was introduced was much higher, 4.9 years. This figure is based on 51 patient records.

Lobotomy: Background and Prevalence

The term “lobotomy” (*lobotomi* or *leukotomi* in Scandinavia) appeared for the first time in November 1935 in Portugal when the neurologist Moniz and the neurosurgeon Lima cut the nerve fibers between the frontal lobe and the middle brain of a 60 year-old disturbed woman. Lobotomy was introduced in the United States in 1936 by Freeman and Watts. Several variants of the operation appeared between 1942 and 1960, all grouped under the term psychosurgery, defined as “surgery on the brain, that is usually regarded as histologically normal, to influence behavior disorders” (Freeman and Watts, 1942, p. 8). The controversy over lobotomy stems from its nature as an extensive operation which inevitably results in permanent brain damage, and from the fact that such operations (as with other invasive treatments) were often performed without the consent of the admitted persons, their relatives, or guardians. After 1960, more sophisticated psychosurgical procedures appeared, such as stereotactic operations using electrodes and capsulectomy using laser (Hansen, Andersen, Theilgaard, and Lunn, 1982, p. 8). Lobotomy appears to have been a typically western phenomenon, not as well received in the East. For example, in 1944 Stalin proposed a ban on psychosurgery (Laitinen, 1977, p. 484).

Lobotomy in Scandinavia

The introduction of lobotomy in Scandinavia was not an easy matter. In Sweden, Gøsta Rylander proposed in 1939 that lobotomies be attempted, but the idea met with initial resistance:

Once as a young assistant at the Psychiatric University Clinic of Stockholm I gave an account of the just published monograph [on lobotomy] by Moniz, . . . pointing out that anxiety was reduced in these cases. My chief, Professor Wigert, was horrified and forbade every experiment of that type with human beings. Then I approached Olivercrona, the neurosurgeon. He said that psychiatrists damaged the brain by electroshock treatment and that there was no reason to destroy part of it in such a doubtful way as Moniz had done. (cited in Laitinen and Livingstone, 1973, p.3)⁴

According to Rylander, without the influence of Freeman and Watts’ 1942 book *Psychosurgery*, it is doubtful that lobotomy would have been used in Sweden (see Laitinen and Livingstone, 1973, p. 1). Approximately 3300 persons have been lobotomized there (440 lobotomies per million inhabi-

⁴Quotes from Norwegian, Swedish, and Danish sources have been translated into English by Joar Tranøy and Thomas VandenBerg.

tants), and Sweden remains the only Scandinavian country where psychosurgery is still performed.⁵

In Denmark, the well-known Danish psychiatrist Erik Strømgren noted that lobotomy also encountered initial resistance there but was then quickly embraced. Strømgren (1991) remembers that in 1939, at the International Congress of Neurology in Copenhagen, Freeman was an invited speaker and he described his lobotomies.

All Scandinavian psychiatrists who listened to Freeman shook their heads, deeply shocked: "Never in our lives." But the situation changed rapidly. We heard of good results on schizophrenics. Five years later most of us felt an obligation to offer this operation to the worst of the schizophrenics. In the meantime many good results from this operation had been reliably reported in the United States and England. We could no longer resist this operation. It would have been unethical. (p. 5)

About 3500 persons were lobotomized in Denmark (875 lobotomies per million inhabitants), where the operation was eliminated in 1981 (Hansen et al., 1982).

In Norway, the development of lobotomy was sustained for twenty years by the efforts of Gaustad and its director, and was influenced by links with American psychiatry. Ødegård had studied in the United States with Adolf Meyer (see Astrup, Dalgard, Noreik, and Sundby, 1977, p. 7). Ødegård's assistant, Carl W. Sem-Jacobsen, traveled to the United States to complete his own study of psychosurgery and established a psychosurgery project at Gaustad in the mid 1950s. Gaustad remained a center for psychosurgery research until the 1960s, with financial support from the Ford Foundation and the United States Department of Defense (Annual Report, Gaustad Mental Hospital, Oslo, Norway, 1956, p. 6), and was the last Norwegian institution to cease the practice, in 1974.⁶ Approximately 2500 persons were lobotomized in Norway (714 lobotomies per million inhabitants).

According to the annual reports of the various medical institutions, lobotomies in Norway were usually performed in psychiatric hospitals rather than in the neurosurgical wards of general hospitals, as in Sweden and Denmark. Norway's geography may explain this difference. Indeed, trans-

⁵The only institution which still performs psychosurgery (stereotactic capsulectomy) in Scandinavia is the Department of Neurosurgery at Karolinska Hospital in Stockholm. In a letter to the author (Stockholm, 24 August 1990) Professor Bjørn Meyerson reports that Karolinska Hospital usually performs about ten such operations a year.

⁶Records from a special file, the *Testarkiv* at Gaustad Hospital, show that the last stereotactic operation was performed in 1974 on an outpatient basis on a woman from a psychiatric sanitarium. Its director, United States-born psychiatrist Gordon Johnsen, requested that surgery be performed. Interestingly, between 1961 and 1973, Johnsen treated nearly 500 persons with LSD. In the 1970s, he was among the few psychiatrists who favored lobotomy.

portation to centrally located hospitals with neurosurgical departments is more difficult than in either Denmark or Sweden. Because of this geographical problem, itinerant surgeons with no training in neurosurgery often performed the operations. In western Norway, for instance, lobotomies were often performed by itinerant orthopedic surgeons (Wendelbo, 1989; see *Norges Læger*, 1956 [the directory of medical practitioners in Norway]).

Norway was also alone in performing the transorbital lobotomy. This operation, pioneered in the United States by Freeman, consisted of forcing a solid, stainless steel icepick through the upper eye socket with a twisting movement. This produced an incision in the brain without the surgeon being able to directly observe the course of the incision. The method was so radical and primitive that even Freeman's partner Watts distanced himself from it (Valenstein, 1986, p. 257). However, according to a report from one of the two Norwegian hospitals where transorbital lobotomy replaced the standard "drill-and-scalpel" prefrontal method, it saved both time and money (Annual Reports, Valen Mental Hospital, Valen, Norway, 1949–1955, p. 2). Indeed, the new operation lasted only ten minutes, and the hospital was able to carry out 12 operations a morning as opposed to four as previously reported (Rimestad, 1956, p. 137). The method was even recommended by Ødegård in the pages of *Tidsskrift for den Norske Lægeforening* [*The Journal of the Norwegian Medical Association*], where he argued that it "can be easily performed by the psychiatrist himself with the tools he might have in his pocket, and strangely enough it may be harmless and effective" (1953, p. 411). Another physician, Ragnar Nordlie, who performed several hundred lobotomies, went even further at a conference of the Norwegian Psychiatric Association, stating that standard surgical procedures were not necessary with such a method since "the simple technique by itself may be performed anywhere by anyone" (1949, p. 155).

Lobotomies at Gaustad Hospital

Gaustad was Norway's leading institution for biological treatments in psychiatry. Between 1941 and 1959, when the patient population averaged 500 to 600 per year, figures from its annual reports show that at least 482 persons were lobotomized. This was the largest number for any single institution in Scandinavia. Gaustad also had a particularly high patient mortality rate. For example, of the 135 persons lobotomized between 1941 and 1950, 13% of the men and 36% of the women died. Mortality was especially high in the early years: 18 of the first 35 lobotomies resulted in the death of the patient (Tranøy, 1990, pp. 7–8 and 1992, p. 38; see also Christensen et al., 1992, p. 50). Almost all patients who died succumbed immediately after the operation.

There is no reason to doubt that Norway's medical and public health authorities were aware of this high mortality rate. The medical staff of

Gaustad and that of the National Health Authority (*Helsedirektoratet*) were very closely associated. Many of the leading doctors during that period, including the hospital's director, were alternately employed at Gaustad and the National Health Authority.

Doctors' and Patients' Perspectives on Lobotomy

The social control perspective on abnormal behavior looks to context and social relationships rather than to symptoms or behavior in isolation. It defines deviance more as a quality of a person's response to an act rather than as a characteristic of the act itself. This perspective was clearly put forth by Lemert (1951), Goffman (1963), Scheff (1966) and Rosenhan (1973).

Pressman, in a 1986 dissertation on the history of lobotomy in the United States, emphasized humanitarian interests as a basis for the decision to lobotomize:

That a particular doctor advocated lobotomy in state hospitals is not in itself evidence of malevolent or callous disregard for patients' interests; indeed, many such physicians tendered their decisions on humanitarian grounds. (p.122)

Patients, however, do not always agree with mental health professionals about what is in their best interests. Pressman does not consider this basic conflict of values which typifies much of psychiatric treatment in general and lobotomy in particular. He does not question whether that which seems good to the psychiatrist and society is genuinely good for the patient.

Often, mental health professionals, the patient, and the patient's relatives evaluated the results of the lobotomy differently. The sole criterion for efficacy which traditional follow-up studies of lobotomy used was patient discharge rate (Baharal, 1958; Freeman, 1957; Jenkins, Hosloppe, and Lorr, 1954; Kane, Hurdum, and Schaerer, 1952; Worthing, 1949). Of course, the fact that a patient is discharged tells very little about the quality of life after discharge. From a sample of 135 patients lobotomized during the period 1947–1950⁷ at Gaustad, 38 were discharged. An examination of the post-discharge records of 27 of these discharged patients is very instructive (Tranøy, 1993b, p. 985). The mean time of observation after discharge was four years, with a range of 1.5 to 17 years. As a result of their lobotomies, discharged patients found it difficult or impossible to organize their own activities, to conceptualize, to think ahead, and to anticipate their own needs. Some showed a marked decline in their ability to take care of themselves (Tranøy, 1993b, pp. 985–989).

⁷The total number of patients lobotomized during this period is at least 166.

One example concerns a 30 year-old man with the diagnosis of "paranoid schizophrenia." After he was lobotomized the doctors on staff described him in his medical record as "Clever in work. A little emotionally blunted. Natural behavior. Little knowledge of the illness." The doctors concluded, "He does not seem to show any symptoms of psychosis, but is emotionally reduced, as are most lobotomized schizophrenics." His parents, however, were dissatisfied with their son's adjustment after discharge. The father described him to the local doctor as follows : "[He has] poor working ability, slovenly behavior and many troublesome attacks." The man was also no longer capable of finding or holding a job.

Another example involves a young woman. Her mother at first did not consent to having her daughter lobotomized, but finally acquiesced under pressure from hospital staff. Some years later the mother wrote a book describing the fate of her daughter after the lobotomy (Wenche, 1956).

It has been such a long time since Nina was operated upon that we cannot expect to observe any more changes. The only thing we can conclude is that the lobotomy has made her rude and a more primitive creature. The lobotomy has reduced the humanity within her. She is now incapable of thinking and feeling as a complete human being. (p. 73)

However, the psychiatrist who wrote the last chapter in the book positively evaluated the lobotomy:

The operation has been used in long lasting and serious cases of schizophrenia, especially conditions of compulsive anxiety which have not responded to any other treatment. In such cases we have often had good results. Nina's mother, too, has experienced the lobotomy as a miracle. (p. 87)

Patient Resistance Against the Hospital Regime

Hospital records show that troublesome persons were among the first subjected to lobotomy. Two behaviors were perceived as particularly oppositional by the hospital staff: (a) more than one escape or attempt to escape, and (b) more than one letter of complaint to the director of the hospital or to someone outside the hospital (a lawyer, for example). Among the patients lobotomized at Gaustad, 31 can be identified as especially oppositional, in that they fit both these criteria (Tranøy, 1993a, pp. 46–47).

These patients were lobotomized sooner than their less troublesome fellow patients. While 85% of this special group of oppositional patients were lobotomized less than four years after their illness was diagnosed, only 46% (n=174) of lobotomized patients in general were operated upon within this time period. Fifteen of the 31 had been at Gaustad one year or less before they were lobotomized, but only 12% of the whole group of lobotomized per-

sons had been at the hospital for a correspondingly short period before their operation. Furthermore, ten of these 31 oppositional patients were subsequently lobotomized a second time.

Most of the oppositional patients refused to accept forced hospitalization. They were especially opposed to receiving shock treatment. Because escape attempts were considered by hospital staff to constitute oppositional behavior, because oppositional patients were more often subjected to lobotomy, and because the mortality rate from lobotomies at Gaustad was so high, trying to escape from Gaustad could be dangerous. Two examples illustrate this.

In the first, a young gypsy woman was diagnosed as an "hysteric psychopath." She escaped from Gaustad several times. In the hospital, she wrote a series of letters to authorities outside the hospital begging to be spared from further shock treatments. For unknown reasons, her letters were confiscated and thus never left Gaustad. Instead they were added to her medical record. In 1946 she also wrote to the director of Gaustad:

Please, be so kind as to let me have one more chance. I beg you, very respectfully, Sir, to let me have one more chance. I promise to behave, and admit that I have been stupid before. By now I have learned that this is deadly serious.

As a result of her oppositional behavior this woman was lobotomized. Nevertheless she kept on trying to escape from the hospital, and became difficult to handle, as notes from her record show:

She is noisy this afternoon. She wants to leave and get some cigarettes. She is still difficult, threatens and shouts. Cardiazol shock treatment was started. She complained about nausea after this treatment. She is also very anxious, curses and cries.

The woman's resistance continued to present great problems to the hospital staff. It was decided that she should be lobotomized a second time since shock treatments were "less effective." The day before the operation she was isolated in a cell and informed of her upcoming surgery: "She has been told that tomorrow we will try a new brain operation." Although the woman was informed, her relatives were not. They first heard about the surgery several days later. By that time the woman was dead due to a hemorrhage immediately after this second operation.

Another example concerns an elderly and work-worn woman who was admitted to Gaustad in 1945. She had been in the work force for almost forty years until that point. When she was admitted the hospital staff evaluated her as follows:

The condition is what we call agitated melancholy, like that we often see in old age Since she is elderly and very fat, shock treatment should be avoided. In the beginning one should try to ignore her somewhat, as she has been given too much attention.

In spite of the medical risk she was given 14 shock treatments in a six week period. She then succeeded in escaping, but was soon returned to Gaustad. During the course of a two-year stay at Gaustad this woman wrote several letters which were confiscated by the hospital and added to her medical record. This bothered her very much, as an excerpt from one of the confiscated letters illustrates:

It is difficult to write letters here, because the physicians read everything that is written, and not everything is to their liking, and I have been forced to rewrite several of my letters The physicians cannot be given any honorable mention for the way they treat me, and I have told them that I cannot stand being treated in such a cruel way as they have done.

She also wrote to the hospital staff:

I had counted upon the promise you gave me not to put me through any more of those cruel treatments. Those treatments have made me so weak that I cannot stand any more of them. No one should be surprised that one can become strange and eccentric by experiencing something so awful. If one can be made insane, I am an example.

As a result of this oppositional behavior the woman was lobotomized, and died immediately afterward.

A highly educated middle-class man in his late thirties, diagnosed as "paranoid psychotic," displayed another kind of resistance. He did not consent to commitment to Gaustad. The chief physician described him as follows:

His character during hospitalization has been basically rigid and formal, intense in arguing in a calm, but somewhat depressed way, with a clear undertone of indignation and strong self-respect.

The patient did not want to talk about his illness:

It is difficult to get him to talk about the illness. He says it is a private matter . . . [and that his] troubles are caused by other people's foolish behavior.

This patient began to keep his eyes tightly shut. This seemed to annoy some of the hospital's doctors:

If we ask him, he repeats constantly that he has a little cold. He is stuffed from his nose and upward to the eyes and the forehead. He asks spontaneously for his suitcases, tobacco and cigarette paper or glasses.

In response the man was treated with electroshock:

The patient has been given only one shock treatment, since we first want to observe the development for a while. He is standing in the corridor. As usual he keeps his eyes tightly closed. If we ask him about the reason, he constantly repeats that he has a little cold. He is without affect and speaks in a toneless voice. It is hard to provoke him. When we ask him about his purpose in using glasses since he does not want to open his eyes, he replies that his cold is better. Besides he wants something to read. He is asking for a book by Nietzsche from the library.

The patient continued to keep his eyes closed. The therapists were very interested in this:

We asked him about his eyes. Yes, they are better. He is soon going to open them, but only if we give him the assurance that he can leave the hospital. For him it is a necessary response to the injustice committed by the hospital. He is very eager to prove that his eyes, in fact, are intact. He reads a couple of lines in a book. When he does his reading, he opens his right eye a little, but keeps the left closed. He constantly groans a little and curses. His arms and legs are trembling. He says, "What would you, who know so much about everything, do if you were in my situation?"

Several series of electroshock treatments changed this patient. According to the hospital record: "Yesterday the patient kept his eyes open all day." Several days later the patient was forced to participate in a presentation for medical students:

When he was shown to the students, he reacted with a stubborn and strongly self-willed attitude. He declared that he was exposed to indignities, with constant restraint of freedom of movement. He was thinking of closing his eyes again and keeping them closed for some weeks. [He said] "The patients in the hospital do not need to use their eyes. Even shaving, etc. can be carried out without the help of sight." He gave a somewhat long speech that attempted to minimize our information about him. He talked in a very sensitive voice. After some time he built up strong affect. He quivered, trembled and gesticulated.

Within five days of his protest the patient was treated with a series of six electroshocks:

The patient has now finished the electroshock treatment of six complete shocks. We succeeded in opening his eyes. Now he is at work putting lines on forms.

Within a year, this patient was lobotomized. Although he had become more manageable, he continued to oppose the therapists' methods. Eight months after his first surgery, he was lobotomized a second time. Then he was discharged and described as "Quiet, compliant and easy to handle, but without a special love of work."

Many of the patients who tried to escape or fight against the regime at the institution were not particularly psychotic. However, it appears that, at least inside the institution, they persisted in habitual rule-breaking and in violating unstated norms (see Scheff, 1966, pp. 33-34).

Three Myths about Lobotomy

Several beliefs about lobotomy were used to justify the practice. It is understandable that, soon after shock treatment, lobotomy and neuroleptic drugs were introduced, leading psychiatrists described these as progressive and beneficial methods (Astrup, Dahl, and Retterstøl, 1980; Ødegård and Austad, 1956; Retterstøl, 1979). Today most mental health professionals acknowledge that lobotomy is not a useful treatment. Many suggest, however, that it was appropriate when it was in common use because no other treatment methods were available. For example, in a recent history of lobotomy, Swayze (1995) states:

Initially, psychosurgery was promoted only as a procedure of last resort. But as time passed, it was increasingly used at overcrowded and understaffed state psychiatric hospitals, since many patients had failed to respond to all other therapy and had been hospitalized, in some cases, for years. After psychosurgery, many appeared to improve to the point that they were discharged from the hospital (or at least were more cooperative). This gave impetus to those who proposed using the procedure early in the course of illness as a first-line treatment. (p. 512) [See also Astrup et al., 1980; Crossley, 1993; Retterstøl, 1975.]

These assertions are based upon three beliefs which, upon closer examination, turn out to be myths: (1) that lobotomy was a product of overcrowded conditions in mental hospitals, (2) that the decision to lobotomize was based upon the therapeutic effects of the operation, and (3) that the mental health community was unaware of the damaging effects of psychosurgery.

Overcrowding

A glance at the historical record shows that overcrowding cannot explain the extensive use of lobotomy in Scandinavia. The annual reports of mental hospitals in Norway and Sweden show that the frequency of lobotomies does not correlate with the degree of overcrowding and understaffing at the various institutions.

For example, Frøsø Hospital, Østersund, Sweden (900 patients) performed no lobotomies between 1950 and 1952. In 1950, a passage in the Annual Report stated: "As a means to decrease agitation, lobotomy is not very useful. We have obtained the same results with occupational therapy and strict discipline" (p. 2). During this period overcrowding at Frøsø varied from 10 to 20%. When Frøsø began performing lobotomies again in 1952, overcrowding was no greater than before (Annual Report, Frøsø Hospital, Østersund, Sweden, 1953, p. 1).

Dikemark Hospital, outside Oslo, Norway (about 800 patients) shows the same pattern. It was not overcrowding that led to the introduction of

lobotomy. For many years the chief doctor at this hospital, Rolf Gjessing, was opposed to lobotomy and electroshock because he felt they involved mutilation of the brain. During this time the hospital staff was able to cope with overcrowding without the use of the surgery. Lobotomy was introduced after Gjessing's retirement in 1953 although the hospital was no more overcrowded at that point than it was before his retirement (Annual Report, Dikemark Hospital, Dikemark, Norway, 1953, p. 12). A study of the situation at Gaustad shows the same lack of association between overcrowding and the number of lobotomies as at Dikemark. For example, 43 persons were lobotomized in 1950 in comparison to 29 in 1951 even though the hospital was more overcrowded in 1951 than in 1950 (Annual Reports, Gaustad Hospital, Oslo, Norway, 1950–1951, p. 1).

Between 1941 and 1959 at Pilgrim State Hospital in New York, the world's largest mental hospital and more than ten times larger than Gaustad, between 1000 to 2000 patients were lobotomized, compared to about 500 at Gaustad during the same period. The rate of overcrowding at the two hospitals was quite similar ("Lingering Effects," 1991; Pressman, 1986). In West Germany, Switzerland, the Netherlands, Austria and France, very few lobotomies were performed. In the Netherlands, for example, psychiatric hospitals with 1500 patients or more (two to three times larger than Gaustad) averaged only 13 operations in 1948 (Ødegård, 1949, p. 66).

In Stockholm, Sweden, where the Beckomberga Hospital was three to four times larger than Gaustad, annual reports show less lobotomies performed: 345 at Beckomberga compared with 500 at Gaustad. Other mental hospitals in Sweden were even less likely to perform lobotomies. For instance, Långbro, Stockholm (1100 patients) had in 1948 an overcrowding rate of 20% versus 9% at Beckomberga. In spite of this, during the same period Långbro lobotomized a single person while Beckomberga lobotomized 119 (Wohlfahrt, 1949, p. 218). At Valen Hospital, located in a rural district in Western Norway, 263 persons were lobotomized before 1953, but only 92 after 1953, although a large increase in overcrowding took place after 1953 (46.1% in 1953, 51.2% in 1954 and 57.6% in 1955) [Annual Reports, Valen Hospital, Valen, Norway, 1949–1955].⁸ To summarize, overcrowding of psychiatric institutions was a widespread, international phenomena, but the number of lobotomies varied sharply from country to country and from institution to institution. This disparity in the number of lobotomies was influenced by factors other than overcrowding.

⁸The introduction of neuroleptics may have had an affect on this decrease.

Therapeutic Effects

Patients' medical records and other primary source materials show that patient control was a more important factor in the decision to lobotomize than alleged therapeutic effects. For example, in the second official Norwegian report on the effects of lobotomy in *The Journal of the Norwegian Medical Association* the function of lobotomy was summarized as follows:

... many have been lobotomized because they have caused problems of discipline and control. The patients have become quieter and less dependent on drugs. Solitary confinement and other coercive measures have been reduced. The problematic wards have changed in character. More patients are actively involved [on the ward]. (Rimestad, 1952, p. 234)

This is also illustrated by the report of a leading doctor at the 1948 conference of the Norwegian Psychiatric Association:

Last summer and fall the troublesome women's ward was a real nightmare, and I believe that I have never seen it so bad. Throughout the autumn we took the trouble-makers one after another and had them operated upon. Now the ward is completely different. (Nissen, 1949, p. 162)

That same year one of the doctors from the National Health Authority in Norway stated the following:

Cases were primarily selected when a high degree of agitation resulted in nursing problems. In short, when chronic illness was a nuisance to the patient himself, to fellow patients and the hospital. (Knudsen, 1948, p. 1821)

Another psychiatrist at Gaustad Hospital, who later held a prominent position with the National Health Authority, stated the following:

When chronic patients cause troubles, a short series of electroshocks can make them calmer and more content. If the patient has severe suffering, a lobotomy can lessen the pain and tranquilize the patient. After the introduction of the new methods of treatment, the whole spirit and atmosphere at the hospitals has changed. We are more optimistic about effecting a cure. The disturbance caused by chronic patients is reduced. The way we treat them makes everything calmer and more pleasant. (Brekke, 1954, p. 148)

According to the logic expressed in the above comments, the best interests of the patient, those of his or her fellow patients or those of the hospital were legitimate grounds for lobotomy. Since mental illness may be considered, by definition, to be a nuisance to the patient him/herself, the first condition is always fulfilled. Thus, the interests of fellow patients and those of the hospital become decisive.

Another expression of the control-oriented view underlying lobotomy is contained in the first official report on the results of lobotomy [on three women] in Scandinavia published by Gaustad Hospital in 1945:

Her [one of the women] behavior has become more social. She is now completely orderly and easy to get along with in a natural, passive way . . . Instead of the haggard, scared and suffering preoperative mind, all three women now are stable and tranquil, partially marked by a lack of interest in complex tasks. Thus it is not hard for them to take up sewing, weaving and the like. (Torkildsen, 1945, p. 1237)

That alternative treatments were available is suggested by the decision of several Swedish mental hospitals to stop using lobotomy even before the introduction of neuroleptics. The annual reports of 25 of these hospitals show that one third had stopped performing lobotomies by 1954. Some hospitals felt that occupational therapy and the ordinary hospital regime could replace lobotomy as "a method against severe troubles" (Annual Report, Frøsø Hospital, Østersund, Sweden, 1950, p. 2). Others began to oppose lobotomy because they found that the operation produced nonspecific brain damage (Tranøy, 1992, p. 50). Swedish neurosurgeons were also opposed to performing lobotomies. This opposition made it difficult for Swedish hospitals to find a surgeon to perform the operation (Tranøy, 1992, pp. 51–53). Even a few Swedish psychiatrists were opposed to lobotomy. One was forced to resign from his position as the Associate Director of the mental hospital in Nyköping because the Director felt that his opposition to lobotomy was criminal (Annual Report, St. Annas Hospital, Nyköping, Sweden, 1950, p. 2). The trend away from lobotomy was, however, not followed in Norway. There all mental hospitals which had begun to perform lobotomies continued to do so until after the introduction of neuroleptics. In fact the Norwegian National Health Authority reported in 1953: "More and more hospitals are now doing lobotomies" (National Bureau of Statistics, 1954, p. 17).

Ignorance of Damaging Effects

Ignorance of the damaging effects of lobotomies does not hold up to scrutiny as a valid justification of the use of lobotomy. Damaging effects such as the destruction of personality were, in fact, discussed very early in the development of the surgery. Freeman and Watts (1942) mentioned this particular injury in the foreword to their first book. Even earlier, the authors had emphasized that every patient who was lobotomized lost some of their spontaneity and creativity (Freeman and Watts, 1937, pp. 25–27).

Norway's leading psychiatrist, Ørnulf Ødegård, presented in 1945 to an assembly of Norwegian neurologists and psychiatrists a thorough account of the "postlobotomy syndrome," which he characterized as "The reduction in

ability to distinguish between right and wrong, to express interest; the loss of the ability to dream, to make plans, to improvise, etc.” (see 1947, p. 82). In addition to observations on patients from Gaustad, Ødegård cited the well-known neuropsychologist Donald Hebb, who in 1945 published an extensive study of the effects of the operation. Hebb stressed the same type of complications as did Ødegård, and his study demonstrated that the effects of the operation changed over time and created new complications (Hebb, 1945, pp. 23–24).

Damaging effects were also discussed at the Scandinavian Congress of Psychiatry in 1946. The Congress concluded that, among other things, lobotomized persons lost their feelings, their overall initiative, and their ability to plan ahead. The Swedish psychiatrist Snorre Wohlfahrt concluded:

It is distinctly hazardous to [lobotomize] schizophrenics These patients end up postoperatively no longer caring about their future, but only living in the present In some cases, especially at a somewhat later stage, one observes a certain euphoric tendency, loquacity and general motor unrest. They are extroverted and like to observe their environment. They comment on what they see and hear in the spontaneous and often tactless way of children, evidently because their capacity to look into the future is so impaired that they cannot foresee the effects of their words or actions All these symptoms, in successful cases, subside in the course of time. (1947, p. 353)

Another Swedish psychiatrist stated that lobotomized persons lost much of their feelings: “Their emotions have lost in richness and depth.” He quoted one of his patients who said “I do not experience happiness and sorrow as I used to. Nothing is really enjoyable any more” (Rylander, 1947b, p. 388). In sum, despite knowledge of its damaging effects, very few of the psychiatrists who used lobotomy seemed inclined to discontinue it. Lobotomy continued to be considered justified as a part of the fight against debilitating psychosis.

An Alternative Explanation

To understand the extensive use of lobotomy in Scandinavia, especially in Norway and Denmark, it is necessary to look closer at the regional historical context. The struggle for the expansion of psychiatric authority began during the Second World War (Tranøy, 1992, p. 27). At first the Nazi puppet government limited the use of electroshock treatment in mental hospitals (Melsom, 1943), stressing that this treatment could only be used with the consent of the patient’s family or legal guardian. This limitation was so vigorously opposed by psychiatrists that it was modified shortly thereafter so that the treatment could not be used on a *regular* basis without consent.

With the end of the Second World War came the breakthrough that Norwegian psychiatrists had been waiting for. The German occupation

destroyed many national institutions. The elimination of the Nazi puppet government created a vacuum in the supervision of the medical profession. In addition, the prevailing social democratic political philosophy — with its emphasis on systematic social planning — turned over broad authority to a power elite of experts. Psychiatrists gained a considerable measure of autonomy in the development of their profession. During this period the medical profession established a hierarchical structure of authority through official organizations like the *Helsedirektoratet* in Norway and the *Sunhedsstyrelsen* in Denmark. These organizations served as centers for medical professional power.

Eugenics was also practiced under the progressive social democracies in Denmark and Norway, but not in Sweden (Tranøy, 1993c). On June 1, 1929, Denmark became the first country in Europe to enact a law requiring sterilization and castration of certain groups. Denmark continued to be the leading practitioner of eugenics in Europe in the early 1930s, but was superseded by Nazi Germany by the end of the decade. Some of the early proponents of lobotomy, such as Ødegård, also practiced eugenics, particularly against the taters, a group in Norway related to the gypsies (Tranøy, 1993c, pp. 47–50). The practice of eugenics was supported by directives from the National Health Authority, which in a letter to the Central Administration for Special Schools in 1947 referred to plans for the sterilization of so-called “inferior variants,” which included young tater women diagnosed as feeble minded or sexual psychopaths (see Kontoret for Psykiatri, 1947). Medical power reached a peak about the middle of the 1950s, when a political backlash began. It was claimed that the professionals had too much power, and that they were a state within the state. People who were not medical insiders began to be appointed to positions of authority in the *Helsedirektoratet*.

However, during the decade between the end of the Second World War and the beginning of this political backlash, Scandinavian psychiatrists enjoyed a high degree of autonomy and freedom from oversight in the treatment of patients. By 1946 the requirement for consent for the use of electroshock treatment had fallen by the wayside, being viewed by psychiatrists as superfluous. As one psychiatrist expressed it,

... a consent is unnecessary and in fact a paradox, because I feel that the patient in a mental hospital is always under the authority of the doctors and thus must accept any treatment which the doctors at the hospital think is defensible. This understanding is of great importance to the public, who, however, long ago recognized that mental hospitals are to be considered in the same way as regular hospitals. (Annual Report, Valen Hospital, Valen, Norway, 1946, p. 3)

By 1948 this freedom from requirement for consent was extended to lobotomies if the physician expected that the risk to life and health was small and the possibility of cure or improvement so great that such an operation was advisable.

As a result, Norwegian psychiatry came to the point where the doctor was largely free to treat the patient as he or she saw fit without needing to justify that decision to the patient, the patient's relatives, or any other authority. In this context, it is understandable that what was convenient for the doctors and for the hospital staff became the paramount consideration when making decisions about the treatment of patients.

To summarize this article, the study of the medical records of nearly 175 lobotomized patients in Norway in light of information in Scandinavian medical journals and other sources during the period 1940–1960, shows that the use of lobotomy in Scandinavian psychiatry was not a result of lack of knowledge about damaging effects, that the patient's own suffering was not decisive as an indication for lobotomy, and that material conditions like overcrowding were not significant in the selection of candidates for lobotomy. Instead, in a culture that attached much value to psychiatric authority, lobotomy was simply a psychiatrically approved way of controlling troublesome patients.

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