

# Electroshock and Death

Excerpts from Leonard Roy Frank's *The Electroshock Quotationary*

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The tremendous harm caused by electroshock (ECT), especially brain damage, memory loss and learning disability, is well-established. ECT also entails a serious risk of death. But psychiatrists and proponents deny that ECT is life-threatening. The authoritative American Psychiatric Association's *Electroconvulsive Therapy* (2001) estimates the death rate for people undergoing ECT as 1 in 10,000. Studies and individual reports indicate that this figure grossly understates the risk of death from ECT. This brochure is divided into two parts: the first focuses on the published studies of ECT-related deaths; the second, on accounts of individuals who died during or soon after having been administered ECT.

## — STUDIES —

Estimates of ECT-related death rates vary widely. The lower estimates include:

- 1 in 10,000 (*see in the text Boodman's first entry in 1996*)
- 1 in 1,000 (*Impastato's first entry in 1957*)
- 1 in 200, among the elderly, over 60 (*Impastato's first entry in 1957*)

Higher estimates include:

- 1 in 100 (*see in the text Martin's entry in 1949 and Boodman's in 1996*)
- 1 in 90 (*Sagebiel's in 1961 and Freeman and Kendell's in 1976*)
- 1 in 70 (*Gralnick's in 1946*)
- 1 in 63, among a group undergoing intensive ECT (*Perry's in 1963-1979*)
- 1 in 30 (*Ehrenberg's in 1955 and Kurland's in 1959*)
- 1 in 9, among a group undergoing intensive ECT (*Weil's in 1949*)
- 1 in 4, among the very elderly, over 80 (*Kroessler and Fogel's in 1974-1986*)

1945 — Of the 300 patients treated [with ECT], 201, or 67% are now out of the hospital, either paroled or discharged.... Eighty-eight, or 29% are still in the hospital, either in a state similar to that shown before treatment, or exhibiting various degrees of partial improvement.... Five patients are dead; one committed suicide following relapse from her former improved state; one developed tuberculosis several months after treatment and died from the tuberculous process; one stopped breathing with the application of the first shock and could not be resuscitated (autopsy was refused); one died suddenly three weeks after the last shock after a slight exertion; and one died 11 days after her last

electric shock, during the course of ambulatory insulin therapy. Autopsies done on the last 2 patients showed some equivocal findings.... One is more impressed with the cerebral than the pulmonary factor in evaluating the cause of death.

**EDWARD F. KERMAN** (U.S. electroshock psychiatrist), "Electroshock Therapy: With Special Reference to Relapses and an Effort to Prevent Them," *Journal of Nervous and Mental Disease*, September 1945.

1946 — There were 4 deaths among 276 patients who underwent electroshock at Central Islip Hospital, New York over a three-year period ending in 1945 [editor's summary].

**ALEXANDER GRALNICK** (U.S. electroshock psychiatrist), "A Three-Year Survey of Electroshock Therapy: Report on 276 Cases," *American Journal of Psychiatry*, March 1946.

1949 — There were 5 deaths among 511 patients who underwent electroshock at Pontiac State Hospital, Michigan [editor's summary].

**PETER A. MARTIN** (U.S. electroshock psychiatrist), "Convulsive Therapies: Review of 511 Cases at Pontiac State Hospital," *Journal of Nervous and Mental Disease*, February 1949.

1955 — There were 4 deaths among 112 patients who underwent electroshock at Boston State Hospital. "J. W., aged 72, is the only patient who died as an immediate result of EST. Eight minutes after his 51st treatment he suddenly stopped breathing" [editor's summary].

**RUTH EHRENBERG** and **MILES J. O. GULLILNGSRUD** (U.S. electroshock psychiatrists), "Electroconvulsive Therapy in Elderly Patients," *American Journal of Psychiatry*, April 1955.

1957 — This report is based on the study of 214 electroshock fatalities reported in the literature and 40 fatalities heretofore unpublished, made available through the kindness of the members of the Eastern Psychiatric Research Association.

The death rate in electroshock therapy has been estimated to be approximately one in one thousand patients [of all ages] treated.... The death rate is approximately one in 200 patients, or 0.5 percent, in patients over 60 years of age....

[Of the 254 electroshock fatalities under review in this study], one hundred patients died from cardiovascular causes; 66 patients from cerebral, 43 patients from respiratory; and 26 patients from other causes. In 19 patients the cause of death was not stated.

**DAVID J. IMPASTATO** (Italian-born U.S. electroshock psychiatrist), "Prevention of Fatalities in Electroshock Therapy," *Diseases of the Nervous System*, July 1957. Impastato's 42-page article is the most comprehensive and detailed study of ECT deaths published in the professional literature. Contemporary electroshock psychiatrists and their supporters rarely, if ever, cite this article in their writings. Three-hundred and eighty-four deaths, including the 254 deaths reported in the Impastato study, were documented in Leonard Roy Frank's *History of Shock Treatment*. The death reports were drawn from 109 English-language sources published between 1943 and 1977. The fully-cited sources are listed chronologically, with each entry specifying the number of deaths reported and, in some instances, other details ("ECT Death Chronology," 1978).

1959 — John C. Krantz Jr. introduced Indoklon, a convulsogenic drug, administered by inhalation or injection, to treat mental illness. Two years later, researchers (including Krantz) conducted a comparative study involving 90 patients treated with Indoklon and another 90 treated with ECT. They found that “the complications observed in both groups... seem to be about the same, except for the fact that there were three deaths in the ECT group” [editor’s summary].

**ALBERT A. KURLAND, T. E. HANLON** (U.S. electroshock psychiatrists) et al., “A Comparative Study of Hexafluorodiethyl Ether (Indoklon) and Electroconvulsive Therapy,” *Journal of Nervous and Mental Disease*, July 1959.

1960 — In the present study, 33 women in the group reviewed were treated with electroshock therapy during gestation. Clinical states of severe agitation and/or catatonic withdrawal were considered indications for such treatment, as it was felt that potential hazards of malnutrition, dehydration, and violent injury existed for both mother and fetus. Thus, electroshock therapy was given as an emergency form of treatment. There were 2 infant deaths in the 33 cases treated.... [There was serious fetal damage in two other cases.]

**DAVID E. SOBEL** (U.S. electroshock psychiatrist), “Fetal Damage Due to ECT, Insulin Coma, Chlorpromazine, or Reserpine,” *Archives of General Psychiatry*, June 1960. Comment: “Pregnancy is definitely no contraindication [for ECT] which is again in accordance with the known fact that pregnant epileptic women are not threatened by abortion or premature birth. Even in patients treated at termination of pregnancy convulsions do not produce labor pain or rupture of the membrane. Followups also did not show any damage to the child” (**LOTHAR B. KALINOWSKY** [German-born U.S. electroshock psychiatrist], “Electric and Other Convulsive Treatments,” published in

1961 — There were 3 deaths among 267 patients who underwent intensive electroshock between 1946 and 1960 [editor’s summary].

**JAMES L. SAGEBIEL** (U.S. electroshock psychiatrist), “Regressive Convulsive Therapy and Lobotomy in the Treatment of Mental Disorders,” *Diseases of the Nervous System*, April 1961.

1976 — [Among the 183 patients who underwent ECT at the Royal Edinburgh Hospital in 1971 and 1976, 2 deaths] may have been related to ECT. A 69-year-old woman died 24 hours after her 13th treatment. Postmortem showed a myocardial infarction [heart attack]. A 76 year-old woman also died 48 hours after her 13th ECT. Postmortem showed a myocardial infarction 24-48 hours old. Both patients were taking a tricyclic [antidepressant] drug at the time.

**C. P. L. FREEMAN** and **R. E. KENDELL** (British electroshock psychiatrists), “ECT: I. Patients’ Experiences and Attitudes,” *British Journal of Psychiatry*, July 1980.

1963-1979 — For more than 10 years psychiatrist Dr. Harry Bailey turned Chelmsford [a private psychiatric hospital in Sydney, Australia] into a chamber of horrors. Many patients did not check out alive....

Bailey treated more than 3,000 patients as guinea pigs for his Deep Sleep Therapy (DST) — barbiturate-induced comas lasting up to three weeks — and Electro-Convulsive Therapy, according to the Royal Commission's report.

Between 1963 and 1979 at least 24 patients died as a result of DST. Another 24 committed suicide after being discharged.

In all, 183 deep sleep patients died either in hospital or within a year of returning to the outside world, while 977 were diagnosed as brain damaged....

Chelmsford is now closed. Bailey killed himself with drugs in 1985.  
**MICHAEL PERRY** (journalist), "Horror Tales Emerge from Australian Hospital," *Jakarta Post* (Indonesia), 28 December 1990.

1974-1986 — [The 65 depressed patients in this study were 80 years of age or older upon admission to the Rhode Island Hospital in Providence between the years 1974 and 1983. Thirty-seven were treated with ECT and 28 with antidepressant drugs.] At 1 year [following treatment] we established a 73.0% survival rate for the ECT group and a 96.4% survival rate for the non-ECT group. At 3 years, the survival rate of the ECT group was 51.4% compared with 75.0% survival rate for the non-ECT group.

**DAVID KROESSLER** and **BARRY S. FOGEL** (U.S. electroshock psychiatrists), "Electroconvulsive Therapy for Major Depression in the Oldest Old," *American Journal of Geriatric Psychiatry*, Winter 1993. Put another way, the death rate after one year for the ECT group was 7.5 times higher than that of the non-ECT group: 10 deaths among the 37 ECT patients (27%) compared with 1 death among the 28 non-ECT patients (3.6%). The authors reported that "two patients had only 2 ECTs: one withdrew consent, and the other developed CHF [congestive heart failure] and died before ECT could be continued" and that there was "lasting recovery" for 22% in the ECT and 71% in the non-ECT group." The authors attributed the poor outcomes of the ECT patients to "their advanced age and physical illness."

1995 — The writer, Dennis Cauchon, reviewed five studies of elderly patients who had undergone ECT during the 1980s. There were three deaths among the 372 patients involved in these studies (a death rate of 1 in 124). He mentioned David Impastato's 1-in-200 estimate of ECT deaths among elderly patients [see Impastato's first entry in 1957 above] to Duke University psychiatrist Richard Weiner, chairman of the 1990 APA Task Force on Electroconvulsive Therapy. Weiner, sticking with the Task Force's 1-in-10,000 ECT-mortality estimate, disputed Impastato's 1-in-200 figure — "If it were anywhere near that high, we wouldn't be doing it" [editor's summary].

**DENNIS CAUCHON** (U.S. journalist), "Shock Therapy," *USA Today*, 6 December 1995.

1996 — According to the 1990 APA [Task Force] report, one in 10,000 patients dies as a result of modern ECT. This figure is derived from a study of deaths within 24 hours of ECT reported to California officials between 1977 and 1983.

But more recent statistics suggest that the death rate may be higher. Three years ago, Texas became the only state to require doctors to report deaths of patients that occur within 14 days of shock treatment and one of four states to require any reporting of ECT. Officials at the Texas Department of Mental Health and Mental Retardation report that between June 1, 1993 and September 1, 1996, they received reports of 21 deaths among an estimated 2,000 patients.

**SANDRA G. BOODMAN** (U.S. journalist), "Shock Therapy: It's Back," *Washington Post*, 24 September 1996. Based on the Texas Department of Mental Health's three-year study, which found that one in 95 patients had died within 14 days of undergoing ECT, the APA report, with its estimate of one death in 10,000 ECT patients, understated the ECT death rate by a factor of more than 100.

## — INDIVIDUAL REPORTS —

1942 — *Case 1*. M.C. Philadelphia State Hospital. Reg. No. 51103. Paranoid dementia praecox in a woman of 45. Electrical convulsion treatments, 62 [in 16 of which no convulsion was produced], over a period of 5½ months. Numerous punctate hemorrhages in the cerebral cortex, medulla, cerebellum and basal ganglia. Areas of perivascular edema and necrosis....

*Comment.* The foregoing case is the first reported instance, so far as we know, of hemorrhages in the brain attributable to electrical convulsion treatment....

The importance of the case lies in that it offers a clear demonstration of the fact that electrical convulsion treatment is followed at times by structural damage of the brain. **BERNARD J. ALPERS** and **JOSEPH HUGHES** (U.S. neurologists), "The Brain Changes in Electrically Induced Convulsions in the Human," *Journal of Neuropathology and Experimental Neurology*, April 1942.

1945 — [Shock] treatment is not without risks. A number of unexplained deaths have occurred, large numbers of patients with organic cardiovascular hypertensive disease have been successfully treated, yet some have died from coronary disease shortly after a treatment.... I have had a number of patients die suddenly from cardiovascular accidents, within a few weeks after full recovery from depressive psychoses, and am not fully convinced that the therapy may not have hastened their deaths.

**A. E. BENNETT** (U.S. electroshock psychiatrist), "An Evaluation of the Shock Therapies," *Diseases of the Nervous System*, January 1945.

1946 — Evans reported an instance of pneumonia beginning 2 days after a shock treatment and ending fatally 36 hours later, although he did not charge this complication to the therapy. In an unreported case, symptoms of bronchopneumonia began 10 or 12 days after, and ended fatally 2½ weeks after a shock course, similarly this death was not ascribed to the therapy.

**LOUIS LOWINGER** and **JAMES H. HUDDLESON** (U.S. electroshock psychiatrist), "Complications in Electric Shock Therapy," *American Journal of Psychiatry*, March 1946.

1949 — There were 2 deaths among 18 patients who underwent intensive electroshock at Mapperley Hospital, Nottingham, England in 1949 [editor's summary].

**PAUL L. WEIL** (British electroshock psychiatrist), "'Regressive' Electroplexy in Schizophrenics," *Journal of Mental Science*, April 1950.

1953 — D. H. White female, age 31, was admitted to the hospital April 27, 1953.... [After undergoing a series of 11 electroshocks, she was discharged "in good social remission."]

As she still had a few psychotic residuals, it was arranged for her to return for out-patient treatments. She returned four days after the last hospital treatment and the decision was made to change the technique to the Reiter [ECT machine] and use Atropine, Anectine, and Sodium Pentothal. Patient was given treatment at 9:40 A.M. She apparently never took another breath nor was anyone sure that another heartbeat was felt or heard. She was pronounced dead at 10:40.

**G. WILSE ROBINSON JR.**, and **JOHN D. DeMOTT** (U.S. electroshock psychiatrists), "How Important Is Liver Damage in the Use of Anectine Controlled Electroshock?" *Confinia Neurologica*, vol. 4, 1954.

1956 — Sir: Being in contact with many psychiatrists who give electric convulsive therapy, I am greatly alarmed by personal communications on fatalities which remain unpublished because of understandable fear of lawsuits....

Much more serious [than the risk of death from the use of muscle relaxants in combination with intravenous barbiturates] is the sharp rise of fatalities in patients who are under chlorpromazine [Thorazine] and reserpine [Serpasil] medication while given ECT. I received detailed reports on several such fatalities. One case each of death from ECT during chlorpromazine and reserpine medication. A man, age 55, suffering from a depression, had a blood pressure of 145/90 and a normal EKG. He took a first tablet of 50 mg. of Thorazine the evening before the first ECT and a second tablet of 50 mg. of Thorazine the morning of the treatment. After the convulsion he resumed normal respiration but expired a minute later. No autopsy.

**LOTHAR B. KALINOWSKY** (German-born U.S. electroshock psychiatrist), letter to *American Journal of Psychiatry*, March 1956.

1957 — While some therapists exceed the limits of ordinary prudence by overmedication with potent pharmacologic agents, a few seem to have an attraction for the shock machine itself with the result that the patient is exposed to what may be called an iatrogenic [doctor-caused] status epilepticus. An example: "After intravenous injection of 2.cc. of curare, the machine was set at 70 volts for .4 sec. and a stimulus administered. Immediately after the initial convulsion, the stimulus was repeated. This was done four times." The patient, a 54 yr. old male, died after the fifth procedure....

Use of relaxant drugs unquestionably increases the risk of a fatal accident. In weighing the relative merits of shock therapy with or without relaxants, the therapist might well ask himself the question: How many vertebral compressions would he be willing to trade for one fatality traceable to a relaxant drug? On the subject of risks associated with cardio-vascular disease, it appears that if a patient can tolerate ECT combined with a barbiturate-relaxant cocktail, he can take it straight as well. A certain irreducible minimum of cardiac deaths will occur under any circumstances because the existing clinical and laboratory methods cannot predict accurately an impending coronary accident.

**J. M. RADZINSKY** (U.S. electroshock psychiatrist), "Electroshock Therapy without Muscle Relaxants," *Diseases of the Nervous System*, November 1957.

1961 — What these shock doctors don't know is about writers and such things as remorse and contrition and what they do to them. They should make all psychiatrists take a course in creative writing so they'd know about writers....

Well, what is the sense of ruining my head and erasing my memory, which is my capital, and putting me out of business? It was a brilliant cure but we lost the patient. It's a bum turn, Hotch, terrible.

**ERNEST HEMINGWAY** (U.S. electroshock patient and writer), remarks to the author who was visiting him at the Mayo Clinic in Rochester, Minnesota where Hemingway was being electroshocked in 1961, quoted in A. E. Hotchner, *Papa Hemingway*, ch. 14, 1967. During one of his stays at the Mayo Clinic, Hemingway had posted on the door of his room a notice, the first sentence of which read, "FORMER WRITER ENGAGED IN PREPARATION OF SCHEDULED FULL-SCALE NEWS CONFERENCE" (Frederick Busch, "Fear Was His Beat," *New York Times Book Review*, 25 July 1999). A few days after being released from the Mayo Clinic following a second electroshock series, Hemingway killed himself with a shotgun blast to the head at the age of 61. Several years later, Howard P. Rome, his Mayo Clinic psychiatrist, was elected president of the American Psychiatric Association.

1970 — When I was nine, my mother's mind was murdered by an electroshock brainwashing course which psychiatry often used against unhappily married women whose husbands abused them, a real-life "Stepford wife" scenario. She became a total stranger: passive, emotionally distant and incapable of initiating or sustaining a conversation. Shortly afterwards, this mother of four young boys blew her brains out with my father's pistol.

**RICH WINKEL** (U.S. electroshock survivor and computer programmer), personal communication, 21 September 2005.

1972 — I was hired by Gladman Hospital (Oakland) in 1970 as a night nurse in spite of my open objection to electroshock. My tenure was for 2 and one-half years....

[One night in December of 1972], I found patient Zappane sitting in a chair, staring into space. He was a man in his late sixties, and I believe from his accent that he was an Italian immigrant. The patient of Doctor Adler would be receiving his very first electroshock treatment. I talked to him as I checked his blood pressure. He remained silent as I explained the procedure. As I was about to leave, he spoke: "I'm afraid. I don't want it. I don't want the shock treatment. I'll die from it. I don't want to die. I'm afraid. Will they know where to send my body? Will they know where to send my clothes? This is the worst Christmas I ever had."

I advised him to speak to his doctor and let him know of his fears and that he didn't want the treatment. I wrote his conversation with me in the nurse's observations and charted his vital signs. The EST nurse came to pick up the charts of those that would receive EST that day. I told her that patient Zappane was unusually frightened and believed that he would die from the treatment. She smiled and walked off with the charts. I closed the rest of my charts and signed out for the day.

That night I returned to my usual unit. Shortly after coming on duty I learned from a nurse on Station 1 that patient Zappane had died. I went to Station 1 to see if I could find his chart. It was still there. I read through his medical history and found that he had had a series of strokes and it was known that he had brain lesions (damaged tissue) from his EEG work-up.

That morning I questioned several members of the day staff. Yes, they told me, he fought, he screamed. Yes, he had to be carried to the EST room. He never recovered

from the convulsion and the resuscitating equipment didn't function. He was taken by ambulance to Highland General Hospital, but he was dead in the EST room. We learned several days later that his autopsy determined that his death was caused by a massive cerebral hemorrhage from a "blown" lesion.

I was told by hospital administration that sometimes these things happen and that I should not feel bad about it. After all, I was not responsible for the man's death. And even though it was very risky sending a man in his physiological condition to receive EST, they felt it was worth the risk. After all, he was a depressive and could have committed suicide. And he had signed the consent form when he was admitted.

Patient Zappane did not live to see Christmas, and some of us called it murder. **SUSANNE A. CHRISTOU** (U.S. nurse), "Some of Us Called It Murder," *Madness Network News*, Summer 1983.

1974 — The day after I was discharged, my hospital roommate, Ruth, escaped and jumped from the University of Texas tower. She died on impact — a heap of broken bones to go with her broken spirit. Only three days before she had told me that she was tired of walking around like a zombie. She blamed this zombiness on a series of shock treatments she had recently received.

**JIMMIE BREWER** (U.S. psychiatric survivor), quoted in "NAPA News," *Madness Network News*, June 1974.

1976 — There were 2 deaths among patients who underwent intensive electroshock, including "a paranoid schizophrenic who had been receiving 10 treatments daily for a few days" [editor's summary].

**PAUL H. BLACHLY** (U.S. electroshock psychiatrist), "Multiple Monitored ECT: (MMECT)," *Convulsive Therapy Bulletin*, July 1976.

1975-1976 — During July 1, 1975 to July 1, 1976, 12 of the 42 patients (28%) who underwent modified ECT at New York Hospital developed an arrhythmia or ischemia following the procedure. In patients with known cardiac disease the complication rate rose to 70%. This rate may have been even higher had all 17 cardiac patients been monitored. The four cardiac patients with no complications were not monitored so arrhythmias could easily have been missed. The 12 patients who developed cardiac complications of ECT came entirely from this group of 17 cardiac patients....

Four patients developed severe complications following an ECT treatment. E.S. sustained a cardiopulmonary arrest 45 minutes after her fifth treatment. She expired despite an intensive resuscitative effort.

**JOAN P. GERRING** and **HELEN M. SHIELDS** (U.S. psychiatrists), "The Identification and Management of Patients with a High Risk for Cardiac Arrhythmias during Modified ECT," *Journal of Clinical Psychiatry*, April 1982. Elsewhere in the article, the authors described the 4 patients' "severe complications" as "life threatening events." Of the 12 patients who developed an arrhythmia or ischemia following ECT, there were 8 women and 4 men. They ranged in age from 58 to 80; half were between the age of 65 and 69. The patient who died was 71. Both authors were residents in the Department of Psychiatry, Cornell University Medical College, New York City, when this study was conducted.



1978 — [Providence's Dr. Albert] Hurley was asked about a recent case at his psychiatric unit where a 64-year-old, psychotically depressed former Boeing employee entered the hospital and began receiving shock treatments within four days. He responded: "That would be pretty unusual, to come in and have shock that soon."...

The man, he was told by reporters, was in good physical health, according to his personal doctor. The man's widow said he never previously had psychiatric counseling or had taken drugs other than a mild tranquilizer.

He remained in Providence about 2 weeks, receiving 6 shock treatments and, 24 hours after the last treatment, on August 12, died.

Cause of death, according to the official death certificate citing an autopsy done at Providence, was listed as pulmonary embolus — or blood clot of the lungs.

"I think it's very unlikely," Dr. Hurley said, "that the death was connected with the man's treatment. It's a question I can't even answer — it hasn't come up for review, yet. But this would be the first case ever reported here, and it is up to the pathologist to say something if it was — and he hasn't."

Dr. Hurley added:

"There are, of course, complications with this treatment, mainly the drugs — the anesthetics — and sometimes the resuscitation involved in post-treatment. One guy almost died the other night."

**DEAN KATZ** and **RICK ANDERSON** (U.S. journalists), "Providence Hospital Is Shock-Treatment Center," *Seattle Times*, 8 October 1978.

1982 — The widow of a man who died after receiving electric shock therapy at Natchaug Hospital [Mansfield, Connecticut] six years ago has been awarded an out-of-court settlement.

The settlement came on the eve of the trial. The plaintiff, Natalie A. Monty, had sued the hospital, its former medical director, Dr. Olga A. G. Little [and others.]

Monty's attorney, Leon M. Kaatz of Hartford, would not discuss particulars of the settlement, which is still being finalized, but he said the settlement is in the "the neighborhood" of \$300,000.

**DEBRA HURLEY** (U.S. journalist), "Shock Therapy Victim's Widow Gets Settlement," *Hartford Courant*, 1 November 1982.

1995 — [Doctors are expanding ECT's] reach — to high-risk patients, to children, to the elderly — altering the profile of who gets shock therapy so much that the typical patient now is a fully insured, elderly woman treated for depression at a private hospital or medical school.

Someone like Ocie Shirk.

Shirk, a widow coping with recurring depression, already had one heart attack and suffered from atrial fibrillation, a condition that causes rapid heart quivers.

On a Monday at 9:34 am, Oct. 10, 1994, she received shock therapy at Shoal Creek Hospital [now known as Seton Shoal Creek Hospital], a for-profit psychiatric hospital in Austin. She had a heart attack in the recovery room. Four days later, she died of heart failure.

Yet shock therapy isn't mentioned on Shirk's death certificate, despite repeated instructions on the form to include every event that may have played a role in the death....

In addition to Shirk, state records show two other patients died after shock therapy at Shoal Creek. Asked about these deaths, [the hospital's chief executive Gail] Oberta repeats "We could find no correlation between deaths of patients and receiving ECT at this facility."

**DENNIS CAUCHON**, "Shock Therapy," *USA Today*, 6 December 1995.

1995 — The death of a chronically ill 79-year-old woman in a mental hospital has focused new attention on the emotional debate over electroshock therapy as a treatment for depression. The woman, whose identity is protected by confidentiality laws, died 24 hours after a shock treatment Dec. 30, 1995. Medical records described her as confused and disoriented when she signed into The Pavilion [an 85-bed, private psychiatric hospital in Amarillo, Texas] on Dec. 27.

**SCOTT PARKS** (U.S. journalist), opening paragraph, "Shock Therapy Scrutinized in Wake of Woman's Death," *Dallas Morning News*, 24 May 1997.

2001 — Shock treatment may have contributed to the sudden death of a psychiatric patient at Graylands Hospital [near Perth, Western Australia]. Giovanni Mario Franco was a physically fit 30-year-old when he was admitted to Graylands in February 1998 to be treated for schizophrenia. But on March 10 he died suddenly in a locked ward under the constant watch of two nurses. Mr. Franco had undergone electroconvulsive therapy — known as ECT or shock therapy — a day before he died. At an inquest into the death this week, Deputy State Coroner Evelyn Vickers was told it was possible the shock treatment caused his heart to stop beating....

Forensic pathologist Dr. Gerard Cadden told the inquest Mr. Franco died from undetermined causes but the most likely explanation was cardiac dysrhythmia — a catastrophic interference to a normal heartbeat. Asked if the fatal heart failure could have resulted from the shock therapy, Dr. Cadden replied: "Yes, it could have caused dysrhythmia." He said the cause could never be conclusively determined, though, because dysrhythmia left no medical traces. Mr. Franco had no history of heart problems and an autopsy revealed his heart was normal....

Electroconvulsive therapy is routinely used in [Western Australian] psychiatric institutions despite concerns about its safety. Treatment involves sending bursts of up to 460 volts into the patient's brain. Australian and New Zealand College of Psychiatrists spokesman Dr. Paul Skerritt said ECT was a widely accepted treatment for depression and other conditions. "This is not a treatment from the dark ages," he said. It does not do the brain any harm.

**JIM KELLY** (Australian journalist), "Shock Death Link," *Sunday Times* (Western Australia), 21 January 2001.