



California's Protection & Advocacy System
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Investigation of the Circumstances of the Deaths of K.C. and C.C. at Patton State Hospital and J.V. at Camarillo State Hospital

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INTRODUCTION

This report presents the results of an investigation by Disability Rights California, Inc., into the deaths of three California citizens between October 1989 and February 1990. Each of these individuals, at the time of his death, was a patient at a state psychiatric hospital operated by California's Department of Mental Health (DMH).

This investigation was undertaken as part of Disability Rights California's responsibility pursuant to federal law, 42 U.S.C. 6042 and 42 U.S.C.

10805, to investigate incidents of abuse and neglect when such incidents are reported to Disability Rights California or if there is probable cause to believe such incidents have occurred. As a result of its investigation, Disability Rights California has concluded that the psychotropic drugs administered to these three men, while effective for some patients, appear to have been a direct cause of their death and that inadequate monitoring of and response to their condition by hospital staff increased the risk factors leading to their death.

All of these individuals were receiving psychotropic medications at the time of their death. J.V. was a 28-year-old patient at Camarillo State Hospital.

On the afternoon of December 26, 1989, he was locked in his dorm room alone, without supervision, for approximately three and one-half hours.

When staff entered the room at the end of that period, J.V. was found dead on the floor, having suffocated on his own vomit. K.C. was a 21-year-old patient at Patton State Hospital. On February 18, 1990, at 2:45 a.m., K.C. was experiencing hallucinations. After rejecting oral medication offered by staff, he was injected with the neuroleptic drug Haldol. Shortly after the injection, K.C. suffered a full cardiac arrest and died in his bed. Though staff were supposed to check on him every 15 minutes, his death was not discovered until hours later when full rigor mortis had set in. C.C. was a 24-year-old patient at Patton State Hospital. On the afternoon of October 9, 1989, while on the grounds of Patton, he began experiencing difficulty breathing and soon thereafter collapsed and died. The cause of death was multiple drug toxicity.

While it may never be definitively determined that the deaths of these three men were caused by psychotropic drugs, there is good reason to believe that this was, in fact, the case. As discussed in this report, these three

deaths evidence a common pattern of inadequate monitoring and procedures to protect patients from the harmful effects of psychiatric medications, leading to the conclusion that sufficient safeguards and training were not in place at these facilities.

Disability Rights California is forwarding this report and its concerns to the Director of DMH, requesting that he review these cases and the practices that allowed these deaths to occur. Disability Rights California is also requesting that protocols be instituted at all DMH facilities to ensure that staff are:

- Aware of the dangerous and potentially lethal affects of these drugs;
- Trained to monitor and recognize signs and symptoms of the affects of the drugs; and
- Trained to deal adequately with these symptoms in order to prevent serious harm to the patient.

Disability Rights California's investigation into these deaths is based upon the following:

- Review of pertinent medical records from state hospitals;
- Review of Ventura and San Bernardino County Coroners' reports and investigations, autopsy reports, toxicology reports and related correspondence;
- Consultation with both an independent forensic pathologist and a board-certified psychiatric expert who reviewed medical records and post-mortem reports; and
- Interviews with hospital staff.

PSYCHOTROPIC DRUGS AND THEIR DANGEROUS EFFECTS

The majority of patients in state psychiatric hospitals are treated with psychotropic drugs. Certain classes of these drugs are known as phenothiazine or neuroleptic drugs. They are used to combat thought disorders, such as hallucinations (seeing or hearing things which do not

exist) and delusions (grossly inaccurate beliefs which are obviously contrary to fact). These drugs were developed from the first phenothiazine, the drug chlorpromazine (known as Thorazine). There are several subclasses of these drugs which differ in chemical structure from chlorpromazine. However, the subclasses retain significant similarities to each other.

Neuroleptic drugs can produce a number of neurological side effects, often called extrapyramidal symptoms. These side effects can include tremors, akathisia (a generalized internal discomfort or restlessness), spasms of the neck muscles, difficulty in swallowing, involuntary protrusion of the tongue, fidgeting, drooling, and a shuffling movement of the feet. Other side effects can include muscular stiffness (dystonia) and involuntary muscular movements (dyskinesia). The use of neuroleptic drugs has also been associated with breathing problems (including suppression of the body's natural coughing reflex), disturbances of heart rate and blood pressure, hyperthermia, neuroleptic malignant syndrome, and tardive dyskinesia (a condition which results in involuntary movements of the jaw, tongue and extremities, and which may be irreversible).

Psychiatrists often prescribe another type of drug to counteract the side effects of neuroleptic drugs. The drug Cogentin is one of these counteractive, or anticholinergic, drugs. While anticholinergic drugs can be effective in stopping the side effects of neuroleptic drugs, they can themselves produce dangerous side effects. Some of the problems associated with anticholinergic drugs are toxic brain syndrome with confusion and memory loss, and in Disability Rights California argument in bladder and bowel function, digestion, and vision. In high doses, Cogentin can cause vomiting because of its effect on the digestive system.

As demonstrated by the recent deaths of three patients at the Correctional Medical Facility at Vacaville, neuroleptic drugs can also in Disability Rights California the body's ability to regulate its own temperature. As a result, persons who are given neuroleptic drugs can become hyperthermic (cold-blooded), and their body temperatures can become dependent upon the temperature around them. Anticholinergic drugs, prescribed to counteract the side effects of neuroleptic drugs, also interfere with the body's ability to regulate its own temperature and can make the hyperthermia worse. Heat

stroke can occur when a patient is given neuroleptic drugs and then is exposed to hot weather, engages in exercise, or becomes excessively agitated.

Though less common than hyperthermia, neuroleptic malignant syndrome is a potentially fatal result of neuroleptic drug use. The onset of neuroleptic malignant syndrome may occur at any time--hours to months after exposure to the drug. It is not related to the duration of exposure to neuroleptic drugs or to toxic overdoses. Once begun, neuroleptic malignant syndrome advances rapidly over a one- to three-day period. Victims of neuroleptic malignant syndrome develop a high fever (up to 108) and extreme muscle rigidity. They may become confused and totally mute; they may sweat profusely and drool. The muscle rigidity that develops can involve the extremities or other parts of the body. This rigidity can be extremely Disability Rights Californianful, leading to muscle breakdown, renal failure and death.

THE DEATH OF J.V.

J.V. was a 28-year-old man who died at Camarillo State Hospital on December 26, 1989. He was involuntarily admitted to that facility on November 21, 1989. A comprehensive physical at the time of admission showed that all of J.V.'s blood test results were within normal limits. His psychiatric diagnoses were schizo-affective, bipolar disorder, and alcohol dependence. According to his records, J.V. had a history of mental illness dating back to age 20. He had been hospitalized for mental illness in Guadalajara, Mexico, and at Olive View Hospital in Sylmar, California.

During his hospitalization at Camarillo, J.V. was being treated with Thorazine, several tranquilizers, lithium and Cogentin. He was given intramuscular injections of Sodium Amytol during periods of agitation. On the day of his death, he had received Thorazine, lithium, Cogentin and Valium.

On December 26, 1989, at 7:15 p.m., staff found J.V. dead, lying face up on the floor of his dorm room. Approximately three and one-half hours earlier, at 3:45 p.m., ward staff had placed J.V. in his dorm room. The room was locked, preventing other patients from entering and J.V. from leaving.

Medical records indicate he was last seen alive at 4:30 p.m. when a staff member observed him sleeping on his bed. There is no account of any other contact with J.V. until he was found dead, 20 feet from the bed in which he had been observed sleeping. According to California regulations, qualified treatment personnel should have been monitoring J.V. at least every half hour.

According to the Coroner's investigative report, J.V. was found dead when a staff member entered J.V.'s room to ask him if he wanted to eat--after a fellow patient mentioned to staff that J.V. had not had his dinner. When the Coroner's investigator arrived at the hospital less than two hours later, he found J.V. to be in full rigor mortis and "to have been dead for some time." As described by the Coroner's investigator, "No other trauma is observed. Small pieces of what appear to be green and silver colored foil are observed about the mouth of the decedent." Investigation determined that the foil observed in and around J.V.'s mouth was candy wrapping, since patients had each received a small bag of Hershey Kisses, wrapped in multi-colored foil, on Christmas Day--the day before J.V.'s death. The autopsy performed on J.V. showed that he died from "aspiration due to chronic schizophrenia." In essence, J.V. died as a result of choking on his own vomit.

According to Disability Rights California's independent expert, a number of drug related factors must be considered in determining the actual cause of J.V.'s death. First, and most apparent, J.V. was taking both Thorazine and Cogentin and died as a result of choking on his own vomit. As noted earlier, the effect of the anticholinergic drug Cogentin on the digestive tract can cause vomiting, and the neuroleptic drug Thorazine can suppress the body's natural coughing reflex. These side effects, which can be lethal, have for some time been cited in the Physicians Desk Reference, and were discussed in psychiatric reports at least as early as 1980. Considering that

J.V. choked to death on his own vomit, the Thorazine and Cogentin he was given may have played a significant role in his death.

While the medical records did not document distinct side effects or drug toxicity in the two to three days before J.V. died, results of post-mortem toxicology tests on his blood samples revealed a potential for toxic to lethal

side effects from Diazepam and amobarbital. J.V.'s lithium levels were not reported. According to Disability Rights California's expert, even when the levels of drugs are not particularly high, "the interaction of several central nervous system depressant drugs can intensify the potential toxic effects." The presence of lithium, according to the expert, will add a further element for producing toxic effects with all the other psychotropic drugs. The expert concluded that there was a "distinct possibility that [J.V.] succumbed to drug toxicity."

A final consideration presented by Disability Rights California's expert was that J.V. suffered from a paradoxical reaction to the medications.

Paradoxical reactions, which are actually caused by the medication, are characterized by agitation and bizarre behavior--which were evidenced by

J.V. As explained by the expert, staff often consider patients' aggressive or bizarre behavior as symptoms of mental illness, when such behavior may actually be caused by toxic levels of the drug. As a result, staff may treat the symptoms (or delirium) with more drugs, which, in turn, increases the toxicity and exacerbates the symptoms they are attempting to treat.

Unfortunately, it appears that this condition, or even the possibility of such a paradoxical reaction, was not recognized in the two to three days before J.V.'s death, and his "agitation and bizarre behavior was considered to be a part of his general mental disorder" rather than an effect of the medications. Untreated, delirium can result in a patient's death.

According to Disability Rights California's expert, J.V.'s death may very well have resulted from a combination of factors including drug toxicity, delirium and withdrawal from alcohol (which is also a potential cause of delirious states). Further, "it appeared that his deteriorating condition was not recognized in time so that appropriate treatment could have been instituted." Failure to recognize the problem was compounded by locking

J.V. in a room by himself, unobserved and unseen for hours before his death.

THE DEATH OF K.C.

K.C. was a 21-year-old male patient at Patton State Hospital from November, 1988, until his death at that facility on February 18, 1990. According to the medical records, K.C. was diagnosed as having schizophrenia (undifferentiated type), a history of substance abuse, a seizure disorder and Klinefelter's syndrome (a condition in which a male has an additional X chromosome). During his hospitalization at Patton, the medication prescribed for him included Prolixin Deconoate, Cogentin, Tegretol, Dilantin and Imipramine.

On the evening of February 17, 1990, K.C. was on a suicide watch because of a suicide attempt one week earlier. Pursuant to doctor's orders, he was to be checked by staff every 15 minutes. K.C. was apparently having difficulty breathing, was agitated, and was experiencing visual hallucinations of mosquitoes in his bed.

On February 18, at 2:45 a.m., staff offered K.C. an oral dose of the neuroleptic drug Prolixin. When he refused this medication, he was given an injection of another neuroleptic, Haldol. After the injection of Haldol, it is reported that staff saw K.C. going to the bathroom at 3:00 a.m. At 6:00 a.m., a psychiatric technician went to awaken K.C. and found him on his stomach, face down on his bed, with no pulse, in full cardiac arrest.

Although K.C. was found dead at 6:00 a.m., Disability Rights California's expert concluded that he must have died shortly after the injection of Haldol. This conclusion is based on the fact that K.C. was in full rigor mortis when he was found, a condition which generally takes several hours to develop. As Disability Rights California's expert pointed out, since K.C. died several hours before he was discovered, there could not have been adequate monitoring of his condition by staff to assure that he was not in any distress or, at the very least, that he was breathing. Sudden death following Haldol administration have been reported in the medical literature.

In addition to the possible fatal reaction to Haldol, K.C. was described as being agitated, as having difficulty in breathing and as experiencing visual hallucinations. According to Disability Rights California's expert, visual hallucinations are more frequent in toxic states. Individuals with a pre-

existing brain injury are generally more sensitive to developing toxicity and delirious states. As K.C. had a history of seizure disorder and Klinefelter's syndrome, this condition was very likely to develop, according to the expert.

The combination of agitation, respiratory distress, and visual hallucinations experienced by K.C. strongly suggests the presence of a toxic state and possibly the development of a paradoxical reaction to the drugs, or delirium. This condition involves a derangement in the cerebral metabolism which produces disorganization in a wide range of mental processes.

Unrecognized and untreated, delirium can result in death from cardiovascular collapse. There is also a heightened danger of toxicity when several medications are used together, as in K.C.'s case.

According to the expert, the behavior and symptoms exhibited by K.C. may have been due to the medications he received. However, staff interpreted his actions as evidence of his mental illness. He was then treated with more drugs, possibly exacerbating the paradoxical reaction and the toxic level in his blood.

While Disability Rights California's expert acknowledges that the actual causes of K.C.'s death may never be determined, a number of elements in his condition and treatment could have produced the fatal result. In addition, K.C.'s low level of intelligence may have made it difficult for him to communicate his problems and symptoms to staff clearly. However, as concluded by the expert, this difficulty underscored the need for careful monitoring of his condition.

THE DEATH OF C.C.

C.C. was a 24-year-old male patient at Patton State Hospital at the time of his death on October 9, 1989. He had been a patient at Patton since May 31, 1984. C.C.'s diagnoses since 1984 were schizophrenia (undifferentiated chronic), antisocial personality disorder and hypertension. The medications prescribed for him included Loxitane, Vistaril, Aldomet, Inderol, and lithium. At 3:15 p.m. on October 9, 1989, C.C. was seen on the grounds of Patton in no apparent distress. At 4:00 p.m. he was brought to

Unit 39 when he started to have difficulty breathing. He then collapsed, became unresponsive and was transferred to San Bernardino County

Hospital where he was pronounced dead at 5:07 p.m. On October 13, 1989, an autopsy was performed and the cause of death was determined to be multiple drug toxicity. According to records, prior to his death C.C. had breathing difficulties and dropping blood pressure. As established by Disability Rights California's expert, "In situations of multi-drug regimes, particularly when there are several medications with similar side effects, e.g. central nervous system sedation and hypotension, there is a risk of toxic interactions."

C.C. was taking several medications that can produce sedation and lower blood pressure--which can also have potentially toxic side effects involving respiratory depression, low blood pressure and bronchospasm. The toxicology report found that at least one of C.C.'s medications, Loxitane, and some of its metabolites, were in the toxic range. C.C.'s difficulty in breathing shortly before his death raises the possibility of drug-related respiratory depression leading to respiratory failure.

While hospital staff has asserted that C.C. was smoking marijuana on the afternoon he died, and that such use was somehow connected to his death, this allegation was not confirmed by the available medical reports. The post mortem toxicology results reported no blood level for substances such as cocaine, amphetamines or cannabis. Rather, according to the expert, "It becomes clear that C.C.'s condition may have been deteriorating for several days and the continued administration of medications which were in part responsible for his increasing toxicity, eventually produced a lethal effect."

CONCLUSION

In his analysis of these three deaths, Disability Rights California's expert underscored the fact that the treatment of severely mentally ill patients who require multiple medications is always hazardous and requires careful monitoring. He advised that vital signs should be taken regularly, and that medical and laboratory tests should be obtained at intervals, depending on the clinical condition of the patient. Further, he advised that changes in a

patient's condition must always be carefully evaluated because sudden or unexplained variations in the mental or medical state of the patient could be an indication of the onset of an adverse effect. When a patient's mental condition becomes unstable and additional medications seem to be required, it should always be considered as a sign of potential difficulty. "At those times," he stated, "more frequent and more intensive monitoring of the patient's condition should be instituted. Unfortunately it appears that this was not done in the cases of the three patients who died."

While Disability Rights California recognizes that these deaths occurred over a year ago, and that the exact causes of the deaths may never be determined, Disability Rights California believes the caretakers must carefully evaluate these cases in order to fully address the serious risks that accompany the administration of psychotropic drugs. If there had been effective monitoring of and response to these three patients' condition, and staff and patients were fully aware of the potentially lethal effects of the drugs administered, these deaths might have been prevented.

Although neuroleptic drugs have been effective and beneficial to many patients, the use of these drugs in hospitals presents serious and profound risks to the patients who, often unwillingly, take the drugs. Disability Rights California believes these risks establish a concomitant responsibility on the part of DMH staff to minimize the risks by: learning about the risks inherent in the use of the drugs; providing training in management of the drugs and how to deal with the potentially lethal effects of the drugs; and fully informing patients of the risks.

RECOMMENDATIONS

As a result of the concerns and questions brought to light by these three deaths, Disability Rights California will request that the Department of Mental Health:

1. Conduct a separate investigation into the circumstances of each of these deaths and issue a report addressing how the deficient practices identified by Disability Rights California will be remedied.

2. Establish policies and procedures which assure that all patients receiving neuroleptic drugs or anticholinergic drugs will have their physical and psychiatric conditions monitored in accordance with accepted medical standards.
3. Enhance and ensure that emergency life-saving policies and procedures are developed and in place at all DMH facilities to prevent death or substantial injury of patients who experience life-threatening effects of medication.
4. Enhance and ensure the close observation and monitoring of patients who are suffering from severe side effects of their medication.
5. Thoroughly review its policy on informed consent and any medical information sheets and training materials used in conjunction with that policy. This policy and the relevant forms should, in order to comply with state statute, include clear and detailed descriptions of neuroleptic malignant syndrome, hyperthermia, paradoxical reactions and other significant side effects of neuroleptic and anticholinergic drugs, with a clear description of the precautions patients should take to avoid or reduce these dangers. The policy and forms should explain that these side effects can be lethal, and must point out the specific medications that may cause these potentially lethal side effects. In particular, state policy and forms should ensure that patients who receive the drugs (whether voluntarily or involuntarily) and their families or friends are warned of the dangers of neuroleptic and anticholinergic drugs.
6. Train all of its clinical staff in the proper use and lethal danger of neuroleptic and anticholinergic drugs. Specifically, such training should emphasize the potential side effects of neuroleptic drugs and their diagnostic signs.
7. Review each patient's medication regimen for evidence of improper use of drugs or failure to treat side effects, and its possible contribution to psychological or physical deterioration of the patient.

8. Develop a protocol that would prevent overlooking the possibility that patients' agitation and discomfort may be caused by the medications and not by a psychiatric illness.
9. Institute policies and procedures which will ensure that patients who are at risk of developing hyperthermia because of the nature of the drugs being administered to them will be placed promptly in air conditioned or cool wards whenever necessary and have their fluid intake monitored.
10. Ensure that all state hospital staff recognize and treat symptoms of neuroleptic malignant syndrome. Emphasis should be placed on those factors which place a client in a high risk category and the necessary monitoring and laboratory testing which must be done in order to detect its onset. Staff should be aware of the specific symptoms, and of the drug and other treatment methods which must be applied aggressively to prevent death or substantial injury from this life-threatening condition.

DISABILITY RIGHTS CALIFORNIA, INC.

**BY: Arthur J. Rosenberg, Senior Attorney and Paul Duryea,
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