

Letters from readers are welcomed. They will be published at the discretion of the editor as space permits and will be subject to editing. They should be a maximum of 500 words with no more than five references and should include the writer's telephone and fax numbers and e-mail address. Letters related to material published in *Psychiatric Services* will be sent to authors for possible reply. Address letters to John A. Talbott, M.D., Editor, *Psychiatric Services*, APA, 1400 K Street, N.W., Washington D.C. 20005; fax, 202-682-6189; e-mail, psjournal@psych.org.

Clozapine in Schizophrenia

To the Editor: I was elated to read Dr. Leo Berman's letter (1) in the May 1999 issue about the use of clozapine in new cases of schizophrenia. I have family members with schizophrenia. When my son (the oldest of five children) became ill with schizophrenia in his 21st year, I did everything I could to educate myself. That was 20 years ago, and there wasn't much material for families.

Luckily, we live in Iowa City, Iowa, the home of the University of Iowa and the Clinical Research Center directed by the outstanding researcher Dr. Nancy Andreasen. My son had been ill for eight years when Dr. Andreasen's center became a test site for clozapine. He was enrolled in the clinical trial and responded remarkably well. Once again he could taste food, see colors, and read, and his muscle tone came back. He has not relapsed in the 12 years since he was first given that wonderful medicine. He never once complained about the weekly blood draw. In fact, he looked forward to seeing the nurses, as it was a social event for him. Because the medicine has made him feel better, he has not been resistant to taking it.

My family is in the family study at the Clinical Research Center. There is a history of schizophrenia on my

husband's side, and two of our children became ill at age 21. We are grateful to be involved in the study, as it may help others.

As part of the study, each participant receives an MRI scan. I have two 17-year-old granddaughters who are identical twins. Their father had schizophrenia, and they both have shown anomalies on brain scans similar to those found in the brains of people with the diagnosis of schizophrenia. They are not ill at this time. As devastating as this finding has been, it also offers the potential for hope. If indeed one of my beautiful granddaughters begins to show symptoms of the disease that can be so destructive, we will not tolerate the idea that they must have a history of antipsychotic failure before being given clozapine. We will demand that they receive the medicine that has given their uncle his life again. We will demand clozapine as a first-line treatment.

I thank Dr. Berman for his vision.

June Judge

Ms. Judge resides in Iowa City, Iowa.

Reference

1. Berman LH: The schizophrenia algorithm (ltr). *Psychiatric Services* 50:703, 1999

The Cost of Not Treating Serious Mental Illness

To the Editor: Dr. Daniel Callahan's cost-benefit analysis (1) in the May 1999 issue betrays a woeful lack of information about the consequences of not treating serious mental illness. Dr. Callahan claims that "it is difficult to make a persuasive case for spending much money on the care of persons with serious mental illness" because it would not "satisfy the principle of the greatest good for the greatest number."

According to the National Advisory Mental Health Council, there are approximately 5.6 million seriously mentally ill adolescents and adults in the United States. Of these, 40 percent, or 2.2 million, are not receiving treatment in any given year. The

group not being treated includes most of the 180,000 seriously mentally ill individuals in jails and prisons and at least 150,000 more who are homeless (2). It also includes approximately 1,000 seriously mentally ill individuals who commit homicides each year (3) and at least 10,000 more who commit suicide.

In calculating "the greatest good for the greatest number," Dr. Callahan should also include in his calculations the number of people who no longer use public parks, public libraries, playgrounds, bus stations, or subways because these facilities have been taken over by individuals with untreated serious mental illness. And he should calculate the time spent and costs incurred when law enforcement officials must deal with problems caused by mental illness, thereby taking them away from other duties.

Dr. Callahan also says that, on a cost-benefit basis, money spent on less serious conditions like "mild neuroses" would "help more people per dollar spent and achieve good therapeutic results." I would certainly like to see citations to the economic and therapeutic studies that Dr. Callahan used to arrive at this conclusion.

E. Fuller Torrey, M.D.

Dr. Torrey is executive director of the Stanley Foundation in Bethesda, Maryland.

References

1. Callahan D: Balancing efficiency and need in allocating resources to the care of persons with serious mental illness. *Psychiatric Services* 50:664-666, 1999
2. Torrey EF: *Out of the Shadows: Confronting America's Mental Illness Crisis*. New York, Wiley, 1997
3. Dawson JM, Langan PA: *Murder in Families*. Washington, DC, US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, 1994

In Reply: Dr. Torrey misunderstands the point of my article. I think it is commonly believed that money spent on persons with serious mental illness is not as well spent as it might

be on other forms of mental illness. His own statistics suggest how great the need is—and how far we are from meeting that need.

Perhaps Dr. Torrey is correct in saying that if we had all the necessary figures, a perfectly good case could be made for treatment, on the grounds of the “greatest good for the greatest number.” But I do not believe in that principle anyway, nor did I mean to invoke it in my article. Instead, I was trying altogether to avoid that kind of numbers game. I wanted to argue that, regardless of the numbers, the claim of the seriously mentally ill was a perfectly strong one, not needing such backing. Indeed, I said that group should have the highest priority. I made the argument on the grounds of what I consider the appropriate goals of medicine, a case that does not need cost-benefit arguments to sustain it.

Daniel Callahan, Ph.D.

A Brief Review of Moonshine Use

To the Editor: A 44-year-old man admitted to our psychiatric service with psychotic symptoms reported that he often consumed illegally distilled grain alcohol, or “moonshine.” The treatment team had assumed that moonshine production, or “bootlegging,” once common and lucrative in the early part of this century, had become irrelevant since the 1937 repeal of Prohibition. This letter discusses moonshine use and possible associated psychiatric complications.

Few articles about moonshine use have been published. Most have focused on rural populations of Alabama, Georgia, South Carolina, and Mississippi. A retrospective review of moonshine-related cases in West Alabama concluded that older males living in rural settings may be most at risk (1). Several articles, however, reveal that consumption is not limited to the Southeast or to rural populations. Incidental findings of moonshine use in urban populations have been reported in the District of Columbia, Michigan, Pennsylvania, and Virginia.

Moonshine use carries health risks that extend beyond those of legally distilled liquor. Lead toxicity is the best-known complication of moonshine consumption and may cause peripheral neuropathies, hematological disturbances, gastrointestinal problems, and endocrine dysfunction. Psychiatric problems are also known to occur, but no articles were found that specifically examined the psychiatric sequelae of moonshine use. The toxic effects of chronic lead exposure from other sources probably represent the best profile of symptoms and include confusion, anger, tension, and fatigue. Neurobehavioral impairments of verbal skills, visual motor performance, and memory are often found as well (2).

Poor water quality accounts for small amounts of lead in moonshine. Larger quantities, however, are derived from the construction materials used in the distilling apparatus itself. The bootlegging operation is especially suspect if one component is a car radiator, used as a condenser, or if lead-containing solder is used at tubing joints. As fluids and vapors flow through the still at various temperatures, lead and other heavy metals leach into the distillate and become concentrated in the end product. Because arsenic is also sometimes present in radiators it, too, may leach into the distillate. A less direct manner of induction occurs when arsenic used to control rodents near grain stores contaminates the mash (3).

Other moonshine contaminants also pose significant risks. Copper and zinc are elemental compounds that have been found at potentially toxic concentrations in samples of moonshine (3,4). A case of fatal ingestion of paraquat, presumably mixed in some illicit moonshine, has been reported (5). Although no articles have reviewed the psychiatric complications of these nonlead contaminants when derived from moonshine, the consideration of toxic concentrations in known moonshine users is prudent. The manifestations of Wilson's disease (copper toxicosis) and the cognitive blunting associated

with arsenic poisoning are two possible psychiatric complications.

Moonshine consumption is a continuing phenomenon. Lead and other heavy metals have been associated with its production and use. Toxic effects from these elements and other contaminants should be considered in patients who report drinking illicitly distilled alcohol. Since moonshine use may be underreported, clinicians should be alert to its possibility.

Richard Montgomery, M.D.

Ryan Finkenbine, M.D.

Dr. Montgomery is a first-year resident in psychiatry at the University of California, Davis, School of Medicine. Dr. Finkenbine is assistant professor in the department of psychiatry at West Virginia University in Morgantown.

References

1. Ellis T, Lacy R: Illicit alcohol (moonshine) consumption in West Alabama revisited. *Southern Medical Journal* 91:858–860, 1998
2. Baker EL, Feldman RG, White RF, et al: The role of occupational lead exposure in the genesis of psychiatric and behavioral disturbances. *Acta Psychiatrica Scandinavica Supplementum* 303:38–48, 1983
3. Gerhardt RE, Crecelius EA, Hudson JB: Trace element content of moonshine. *Archives of Environmental Health* 35:332–334, 1980
4. Havelda CJ, Sohi GS, Richardson GE: Evaluation of lead, zinc, and copper excretion in chronic moonshine drinkers. *Southern Medical Journal* 73:710–715, 1980
5. Conradi SE, Olanoff LS, Dawson WT Jr: Fatality due to paraquat intoxication: confirmation by postmortem tissue analysis. *American Journal of Clinical Pathology* 80:771–776, 1983