

nongamblers. This feature might be particularly relevant to the measures of lifetime depression, incarceration, and bankruptcy in older adults in which odds ratios above 1 were observed, although in all cases, the differences were not statistically significant. As such, future studies of larger samples of older adults seem warranted to investigate the relationship between gambling and these measures in older adults. Moreover, because all three variables represented lifetime measures, additional investigation into the relationship between gambling and current functioning with respect to mood, finances, and legal problems seems important to determine the temporal relationship to the current health of older adults. As we state in the conclusion, longitudinal studies would be important in this regard.

We agree with Dr. Kerber that a more detailed assessment of health would be of significant value. In fact, we state in the article that “the use of specific objective measures of health in future studies would be helpful in clarifying the relationship between gambling and health” (p. 1678). The random-digit dialing survey of the Gambling Impact and Behavior Study frequently employed measures that were designed to yield important information while minimizing respondent burden. Given the early stages of gambling research, particularly in the area of older adult gambling and the conceptualization of gambling within a public health framework (1), we believe that additional research will be important to replicate and extend the current findings as the field moves toward the development of health guidelines for gambling. Because the natural history of various levels of gambling is incompletely understood, particularly for older adults, we agree with Dr. Kerber’s apparent concern about older adult recreational gambling, given that the transition between recreational and problem/pathological gambling in older adults and the factors mediating this transition are not well understood (2). Furthermore, older adult problem gamblers appear to report fewer problems than do younger adult problem gamblers (3), raising the possibility that particularly active screening for problem gambling behaviors in older adults might be clinically important. In summary, we believe that older adult gambling warrants increased clinical attention, and more research is needed to understand the potential risks and benefits of various levels of gambling as they relate to older adult health.

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Infanticide

TO THE EDITOR: There are errors in the content of the article on infanticide by Margaret G. Spinelli, M.D. (1). I served as a media consultant for the case and discussed it with both defense and prosecution experts in November 2003 at the annual meeting of the American Academy of Psychiatry and the Law. Dr. Spinelli cites the high-publicity case of Andrea Yates as an example of postpartum psychosis and is critical of many who were involved.

Although she states that the expert opinions offered “differed remarkably,” this is false. Park Elliott Dietz, M.D., Ph.D., the state’s lead expert, and Phillip J. Resnick, M.D., the defense lead expert, both reached similar diagnostic conclusions of schizophrenia and schizoaffective disorder, respectively. In fact, all of the experts involved as well as outside experts consulted by media outlets reached similar diagnoses based on the available information. To claim that there was “little intervention from the psychiatric community” is to belittle the hundreds of hours spent by experts.

In addition, Dr. Spinelli suggested that the Federal Circuit Courts of Appeals used the Model Penal Code/American Law Institute’s “not guilty by reason of insanity” test. In 1984, in the aftermath of the Hinckley case, Congress passed the Insanity Defense Reform Act, which governs all federal courts. Although Dr. Spinelli claims that “about half” of the states use the Model Penal Code/American Law Institute test, only 16 out of the 50 states currently use this test.

Although there is no doubt that Ms. Yates was and still is mentally ill, her condition simply is not a just postpartum condition. DSM-IV could be faulted because it requires onset of psychosis to occur within 4 weeks of birth; that specific criterion was not met. Ms. Yates had this serious mental illness before she gave birth to her last child, 6 months before the killings. Six months postpartum is hardly a time when a woman is still experiencing the sudden hormonal changes associated with delivery. The Yates case is not a classic example or even a good example of postpartum psychosis.

Mental illness does not de facto equate to “not responsible.” This decision is left to the judge or jurors. They apply the law to the medical circumstances. As the outcome shows, the jury in Texas required 3 hours to reach their guilty decision but only 35 minutes to rule out the use of the death penalty. To those who served on the jury, the evidence was clear. The outcome was also no surprise to the forensic psychiatrists in the case, who realized that the insanity standard being used in the Yates case would be very difficult to reach, given the facts of the case and her testimony that she knew her conduct was illegal.

Although Dr. Spinelli faults the treating psychiatrist for stopping haloperidol 2 weeks before the tragedy for “unclear reasons,” I would suggest that a review of the medical records suggests a sound medical reason for stopping the medication: akathisia.

Most forensic psychiatrists welcome legislative deliberation on the topics of neonaticide and infanticide; the current penal codes do not really fit the behavior about which we are forced to educate the public and the judicial system. The British Infanticide Act (2) might well provide some guidance.

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Dr. Spinelli Replies

TO THE EDITOR: I appreciate Dr. Kaye's forensic expertise. I am disappointed that he interprets my work as an indictment of individuals rather than an invitation to better understanding.

Dr. Kaye's letter supports the premise of my article: that we in perinatal psychiatry have the obligation to foster a greater understanding of the psychiatric implications of endocrine changes in child-bearing women (1). These hormone fluctuations exist in the perinatal period and extend to lactation. Dr. Kaye's letter emphasizes the need for formal diagnostic criteria and guidelines for treatment of postpartum illness.

My information about the case of Andrea Yates was collected from trial transcripts, hours of videotaped interviews, and personal communication with Ms. Yates's mother, brother, and husband, as well as neighbors and friends. Additional information was available from the highly recommended and well-referenced law review by Professor Debra Denno in the *Duke Journal of Gender Law and Policy* (2).

In my article, I highlighted the use of postpartum psychosis because of its association with organic psychotic symptoms, confusion, mixed affective states, and cognitive disorganization (3). These factors have important implications in states that use the M'Naghten rule.

In fact, the bulk of the evidence supports the fact that most postpartum psychoses occur in women with cyclic mood disorders favoring bipolar disorder, schizoaffective disorder, and major depression—but rarely schizophrenia.

The expert witness for the defense agreed that Ms. Yates suffered from schizoaffective disorder. However, there were six experts who testified for the defense. Because each treated or assessed Ms. Yates at a different time during different stages of her illness, they gave similar but contradictory analyses (2). The prosecution's witness diagnosed Ms. Yates with schizophrenia, suggesting that her worsening psychosis occurred after the killings because of the stressors of incarceration and the realization that she killed her children (2). Such disparities are confusing to a jury that looks to experts for information and guidance.

Ms. Yates was a compassionate nurse who worked extraordinarily long hours. She was an honor student, a champion athlete, and an energetic mother—an unlikely picture of schizophrenia (2). Dr. Kaye posits that Ms. Yates was ill for an extended period of time. He concludes, therefore, that she could not have had postpartum psychosis. Paradoxically, her longstanding illness supports a diagnosis of postpartum psychosis. Her psychiatric illness worsened with childbirth, as is expected in a woman with a cycling mood disorder (4).

A childbearing timeline describes Ms. Yates's psychiatric history. She had five full-term births (February 1994, December 1995, September 1997, February 1999, and November 2001) and one miscarriage (November 1996). Continued breastfeeding between pregnancies intensifies the disruption

in the hormonal milieu of a woman who is vulnerable to psychiatric illness. Ms. Yates spiraled further into mental illness with childbirth. Her early births were associated with depression, "visual images," social isolation, and withdrawal from all recreational activities (2). Her final two deliveries were associated with suicide attempts and four psychiatric hospitalizations for documented "postpartum depression." During her last pregnancy, she was an energetic, home-schooling mom, often baking and sewing late into the night. After her delivery on Nov. 30, 2001, her mood continued to spiral downward. In April 2002, she was admitted to the hospital for depression, psychosis, and suicidality. She drowned her five children in June.

Dr. Kaye refers to England's Infanticide Law, which provides leniency and mandated psychiatric treatment "where a woman...causes the death of her child...aged less than one year, but...the balance of her mind was disturbed by reason of her not having fully recovered from the effect of giving birth...or by reason of the effect of lactation." Although such a law seems unlikely to be adopted in the United States, a more realistic resolution may be the education of the legal community and the criminal justice system about our existing science.

In April 2001 a Tyler, Texas, jury found Deanna Laney not guilty by reason of insanity for killing her two sons (5). The reason she was found insane (did not know right from wrong) was because "God" told her to kill her children. When Andrea Yates drowned her children because "Satan" urged her to do so, the conclusion was that she knew right from wrong because she knew "Satan" to be evil. This application of logic to her illogical delusions (2) suggests that the difference between a mother who kills her children because she is insane and one who kills them because she is a criminal is determined by whether the neurochemical imbalances that cause her insanity speak to her as "God" or as "Satan."

I emphasize psychiatry's responsibility to initiate change. When we leave the expert witness with few scientific tools, we fail the mentally ill defendant.

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Reduced Intracortical Myelination in Schizophrenia

TO THE EDITOR: Lynn D. Selemon, Ph.D., and colleagues (1) suggested that frontal cortical volume is reduced in schizo-