Adolescent Parricide as a Clinical and Legal Problem

Carl P. Malmquist, MD, MS

Criminologists contribute to the knowledge regarding the continuing problem of parricide by way of macrostudies, utilizing large samples that reveal patterns of how such acts are carried out, gender differences, and other aspects. Clinicians have the opportunity to pursue microinvestigations into the details of how cognitive processes and emotions operate in the adolescent who engages in such behavior. Such investigations entail pursuing specifics in the psychosocial realm, such as earlier maltreatments and ongoing psychological conflicts, and also being alert to the neurobiological differences between adolescents and adults. The use of battered child syndrome as a legal defense is discussed, with contrasts made between relying on a posttraumatic stress disorder (PTSD) approach and a duress defense, based on explanations related to shame and humiliation.

J Am Acad Psychiatry Law 38:73–9, 2010

Adolescents who kill their parents remain a challenging group clinically and legally. Clinical descriptions are often based on reports from forensic settings and reflect different theoretical viewpoints. Psychiatric approaches thus offer a micropicture based on case studies or demographic data.[1] Adolescent parricides have diverse diagnoses in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR).[2] Although a minority may be psychotic, diagnoses are usually of major depressive disorder, bipolar disorder, or some type of conduct disorder. Comorbid substance abuse problems are frequently present. Victims may be fathers or mothers or both parents. The killing of the entire family (familicide) is seen as a different clinical entity.

Apart from the psychiatric perspective, diverse methodological approaches have been used to study parricides. A criminological approach offers descriptive data extracted from large samples. Heide and Petee[3,4] utilized the Supplementary Homicide Reports from the FBI to obtain data on offenders, victims, and weapons. In a 25-year period (1976–1999) 5,781 biological parricide victims (omitting stepparents), and 5,558 offenders were found. Arguments over money and other matters were the precipitating events in 81 percent of the patricides and 76 percent of the matricides. Handguns, rifles, and shotguns were used in 62 percent of patricides, whereas knives (27%) and handguns (23%) were the dominant weapons in matricides. Their study was not confined to adolescents, but they reported that 25 percent of the patricides and 17 percent of the matricides were committed by persons less than 18 years of age. Compared with adults, adolescents were more likely to use a firearm (57%–80%), a finding that the authors hypothesized as being related to the physical disparity between the parties. By extension, that most adolescent parricides occur in a nonconfrontational setting is also related to physical differences. Rather than acting when the parties are facing off against each other directly, the physically weaker perpetrator uses more covert means to accomplish the homicide.

Another investigation was based on coroners' reports of parricides in Quebec from 1990 to 2005.[5] Sixty-four parents were killed (37 patricides and 27 matricides) by 54 perpetrators (52 sons and 2 daughters). Separate data on the adolescents among the offenders were not provided, but the age range was 14 to 58 years, with six of the offenders under the age of 20. The conclusion was that 70 percent of those committing matricides and 63.9 percent of those committing patricides had a psychosis-induced motive, with 30 percent being intoxicated at the time. A commentary on the article proposed two categories:

Dr. Malmquist is Professor of Social Psychiatry, University of Minnesota, Minneapolis, MN. Presented as the Manfred S. Guttmacher lecture at the annual meeting of the American Psychiatric Association, San Diego, May 20, 2007. Address correspondence to: Carl P. Malmquist, MD, MS, 909 Social Science Building, University of Minnesota, Minneapolis, MN 55455-0499. E-mail: malmq001@umn.edu.

Disclosures of financial or other potential conflicts of interest: None.

adolescents with a cataclysmic reaction to enduring physical abuse, and adults with an untreated psychosis and conflicted relationships with their parents.[6] The commentators suggested extending studies to nonlethal acts of child-on-parent violence.

Recently, a special legal defense has been introduced in adolescent parricide cases: battered child syndrome (BCS), connected to posttraumatic stress disorder (PTSD), and analogous to battered woman syndrome (BWS). This defense has raised questions about the differentiation of parricides by adolescents from other types of homicides committed by adolescents and also from parricides committed by adults. In turn, questions have been raised about antecedent maltreatment that may have occurred and its possible role in adolescent violence. This article offers an alternative hypothesis to the PTSD-related approach to trauma by emphasizing key roles played by the chronic shame and humiliation suffered as a consequence of maltreatment. Such an explanation raises legal questions that are different from those raised in the PTSD approach.

Diverse Case Illustrations

Case 1

A 17-year-old male living with his widowed father devised a plan with a friend to shoot his father. Mixed motives were described involving revenge and financial gain. The friend rang the doorbell, and the father was shot from behind while his son was standing on the steps behind him. There was no history of abuse, and a BCS defense was not allowed at trial. An appellate court affirmed a first-degree murder conviction while holding that expert evidence about BCS was to be admitted only under the regular rules of criminal procedure and that the *Frye* test for scientific admissibility did not apply to behavioral science.[7]

Case 2

A 16-year-old school dropout shot his divorced mother who had been giving him money for marijuana but had recently refused to continue to do so. When he was younger, she had beaten him with a belt, and when he reached age 16, they fought physically. When she refused him money, he shot her while she was in bed and took money to buy marijuana. In the morning, he returned home as though nothing had happened. A BCS defense was raised.

Case 3

A 16-year-old shot his father after his parents returned from dining. Self-defense was raised on the basis of beatings he had received since age two. After a jury verdict of voluntary manslaughter was reached, an appeal was raised about the exclusion of psychiatric testimony on BCS, where a psychiatrist would have testified that the boy feared serious bodily injury or loss of life. The appeal was denied on the basis that the criteria for the admissibility of expert testimony had not been met. There had not been an offer of proof that the pertinent art of scientific knowledge permitted a reasonable expert opinion as part of self-defense.[8]

Case 4

A 17-year-old shot his stepfather, who was returning from work. The trial court denied expert testimony on BCS but an appellate court held that, to evaluate the imminence of danger, the court or jury could use a subjective standard to assess the reasonableness of the defendant's perception of imminent danger in relation to acting in self-defense. The court concluded, "For that reason, the rationale underlying the admissibility of testimony regarding the battered woman syndrome is at least as compelling, if not more so, when applied to children."[9] The helplessness of the boy was juxtaposed to a battered woman who could not escape.

Case 5

A 16-year-old shot his mother five times in the head and neck with a bow and arrow and testified that she had been abusive to him for years.[10] When drinking the night before, she had thrown a beer can at him that cut his lip. He locked himself in his room while she threatened to "beat his face in." Later, while his mother was lying on a couch, he shot her. Psychological testimony about the effects of long-term child abuse was not allowed. The Ohio Supreme Court later held that there was sufficient evidence for an expert to testify regarding BCS as it related to self-defense, stating that ". . .the behavioral and psychological effects of prolonged child abuse on the child have been generally accepted in the medical and psychiatric communities and therefore unquestionably meet the requisite level of reliability for admission as the subject of expert testimony."

Case 6

An occasional case involving psychosis arises. A 15-year-old boy had contemplated killing his father for months, while feeling ashamed of "evil thoughts" centered on mutilation, which he believed his father had inserted into his mind. During one sleepless night, he decided that he could "take it no more." He waited at the end of the driveway where he knew his father would exit in the morning and shot him. No insanity defense was entered but rather self-defense based on child abuse, which was mounted in hopes of avoiding a prolonged psychiatric hospitalization.

The Question of Past Maltreatment

A clinical approach seeks diagnoses that suggest reasons for a homicide. A developmental approach adds a maltreatment component. The difficulty is that the search for a motive may use an erroneous single-factor model, while a host of relevant variables are usually in play.[11] Multiple individual and familial antecedents may be relevant in adolescent parricides, such as impulsivity, low attainment, parental psychopathology, maltreatment in the parents' own background, impaired attachments, mood instability, or some neurobiological vulnerability. Yet, risk factors, just as with variables for criminal offending, do not necessarily produce a psychiatric disorder. While these variables may cause vulnerability in an adolescent, the reality is that the majority of documented maltreated adolescents do not commit a homicide.

Maladaptation is a complex interaction between individuals and their internal and external situations.[12] It involves cognitive, socioemotional, linguistic, representational, genetic, and neurobiological processes.[13] This spectrum offers insights into understanding certain psychopathologies, but it lacks specificity for a future parricide. Legal issues arise in this uncertainty: is the killing an act of self-defense, is some significant degree of excuse present, or is it simply another case of juvenile homicide? BCS as a legal defense requires a specific connection to the killing. PTSD is frequently raised as the bridge. Sometimes a diagnosis of depression is offered, but the presence of depression does not as readily suggest a preceding trauma.

Three problems arise if maltreatment is relied on as the key variable: the overwhelming number of abused adolescents do not commit a parricide, PTSD does not have an inevitable outcome of violence,[14] and most adolescent parricides are nonconfrontational. The hypothesis is then extended to an adolescent's belief that he or she is living in a milieu of imminent bodily harm and can survive only by carrying out a preemptive strike.

When psychiatrists follow the PTSD path, they may have left their clinical moorings and slipped into a legal stance. A clinical condition has been injected to get to a legal conclusion in an attempt to avoid a conviction for first-degree murder. A state of learned helplessness or hypervigilance related to PTSD is posed as the reason for the parricide. As noted, the adolescent may occasionally be delusional, but for the majority, an inquiry into the thinking of the adolescent and the family's interactions reveals diverse antecedents.

A reverse question may be raised as to why more maltreated adolescents do not commit parricides. Even with the false hypothesis that most abused adolescents develop PTSD, the actuality remains that they do not commit homicide. A longitudinal study of those exposed to trauma, with a follow-up extending for 15 years after first grade, found that only 8.8 percent developed PTSD.[15] Similarly, a community-based study found PTSD in less than 10 percent.[16] In a longitudinal study assessing multiple traumatic events, 1420 children at ages 9, 11, and 13 were followed through to 16 years of age.[17] Two categories were considered: being a victim of physical abuse or being a victim of psychological abuse by a relative. The prevalence rates were 3.1 percent and 7.2 percent, respectively, with 13.0 percent and l3.5 percent having a lifetime painful recall. While two thirds of the children in the study were victims of trauma before their 16th birthdays, less than 0.5 percent developed PTSD.

Neurobiological sequelae in the developing brain as a consequence of physical or psychological maltreatment raise similar problems. Research has focused on the effects of maltreatment on the limbic-hypothalamic-pituitary-adrenal axis, with possible impact on developing brain structures.[18] Studies on the developmental neurobiology of stress show underarousal in disruptive behavior disorders and low cortisol levels, whereas anxiety disorders and depression reflect an exaggeration of normal anticipatory hormonal responses. Neurobiological research should be conducted to consider the various types, severity, and duration, as well as environmental factors and resiliency of the individual. Much of the

work in PTSD has focused on adult glucocorticoid alterations or corticotrophin-releasing hormone. Genetic factors may influence the stress response system and the 5-HT neurotransmitter system. The hypothesis is that early exposure to adversity contributes to emotional detachment, and subsequent difficulty in learning from punishment predisposes toward severe and persistent antisocial behavior.[19] Yet, even in such research, most maltreated children do not exhibit such neurophysiological findings, perhaps because neglect encompasses multiple factors.

Adolescents have only a gradual emergence of cognitive capacities in the prefrontal cortex, which controls inhibition and emotional self-control and thus modulates risk-taking and novelty-seeking.[20] While these findings indicate that adolescents may be more vulnerable, they raise the general question of whether, as a class, adolescents should be assessed legally as less blameworthy than adults.[21] Still left open is the search for particulars as to why an individual adolescent commits a parricide, whatever the neurophysiological findings.

The Analogy of BWS to BCS

BCS was developed as a legal defense by extension of the reasoning used in BWS. One role for a psychiatrist might be as an advocate for such an approach.[22] However, arguing a social cause does not resolve the question of legal responsibility for acts of killing. Psychiatric explanations are often insufficient when we try to go beyond the effects of maltreatment on the interactions and mentalizations of the adolescent.

The baseline for BCS and BWS is that battering anyone is unacceptable, more so if the victim is a child or woman. If a foundation for battering has been laid, typical self-defense questions arise such as: how much time elapsed from the last beating to the homicide? How relevant to self-defense is the elapsed time? Is it necessary to believe that death or serious bodily harm is imminent? Does a reasonable belief that such harm would occur suffice? Should the rule be limited only to a proportional amount of force being used? Is it necessary that the accused not initiate the aggression? If a court allows expert psychiatric testimony, the goal is to show that the killing was either justifiable by self-defense or to raise an explanation that mitigates first-degree murder.

A defense of BCS has emerged in adolescent parricides in some jurisdictions, either by legislative enactments or appellate decisions that allow expert testimony. In Maryland, legislation allows BWS testimony but makes no reference to children. When a case of adolescent parricide arose, the court extended the statute to children without any airing of the issue.[23] The argument is that if a BCS defense is not allowed, adolescent parricides are handled like other cases of homicide.

Questions of scientific credibility give rise to *Frye/Daubert* hearings. When BCS was raised as a novel defense, one state supreme court simply held that clinical assessments were social science evidence and did not require such scrutiny.[7] However, the U.S. Supreme Court in a case subsequent to *Daubert*, held that the test applies not just to scientific expertise, but also to technical and specialized knowledge.[24] Testimony is admissible only if based on sufficient facts or data, if it is the product of reliable principles and methods, and if the expert has reliably applied the scientific principles and methods to the facts of the case.

If a court allows BCS testimony, there is the inference that it has accepted the analogy to BWS. However, the analogy requires thorough exploration legally and clinically. Such an analogy is not self-evident, although appellate courts may be unquestioning as in stating, "The underpinnings of that application, we believe, have been generally accepted in the psychological and legal communities and are therefore reliable."[23]

Dilemmas in Adolescent Parricides

Adolescents who commit parricide usually have four legal options: plead guilty, plead not guilty by reason of insanity, offer an excuse to mitigate the degree of the homicide verdict, or argue that the act was justifiable as self-defense. Self-defense usually requires that the threat to life be "imminent" and that the adolescent meet a reasonable-person requirement that a force sufficient to kill the parent was needed to save his or her own life. Meeting these criteria is difficult, especially when the encounter was nonconfrontational.

Battered women were viewed as trapped because they fear more violence if they leave or are viewed as too dependent to leave. Such fears of leaving and the presence of dependency may seem similar for adolescents, yet the pattern of violence with an adolescent differs from that in BWS. In women, repetitive cycles of accumulating tension, leading to battering incidents with explosive rage and subsequent states of

contrition and reuniting, are typical abusive patterns.[25] Outbursts against adolescents do not fit such a cycle and are less frequently fueled by alcohol.

Rather than a contrite restoration, the pattern with adolescents fits a theoretical model of an accumulated sense of humiliation and shame. The pattern witnessed in women is battering leading to PTSD with helplessness and hypervigilance. In contrast, the pattern witnessed in adolescents is an accumulation of unresolved affective components. Maltreatment, perceived as undeserved, thus elicits shame and a sense in adolescents that they are not worthy of respect.

While the hypervigilance postulated for women may occur in abused adolescents, a smoldering resentment is more likely. The calm exterior often described before and after a parental killing puzzles investigators, attorneys, and clinicians. It is as though a necessary act has been performed. Although the idea of their being killed in an undeserved beating may occur to them, adolescents generally continue to live in a state of unresolved tension with the derivatives of shame.

Flimsy and superficial plans may have been laid by the adolescent, and he may have told friends that he wanted to kill a parent. Peers rarely believe that such talk is serious, but occasionally they become accomplices because they did not report the threats. One of the more painful aspects is dealing with the parents of such accomplices who are also facing murder charges for their roles.

The lack of long-range planning by the perpetrator is striking. The adolescent may simply get in the parents' car and drive away without any thought of where he is going. Older adolescents may think of going to another part of the country or world to start over. A common pattern is assuming that the police will think someone else committed the acts. Some believe they will receive an inheritance from the deceased parent. One adolescent who had shot his parent drove away repeating the words of Martin Luther King, "Free at last. Thank God almighty. Free at last." To him, the act seemed a reasonable solution. Such thinking suggests a dissociation originating with responses to earlier episodes of maltreatment. It is as though the homicide is carried out by someone who is "not me."[26] Adolescent parricides elicit ambivalence—sympathy for the adolescent, mixed with questions of responsibility. Is the act one of self-defense or a defiant escape from an existence in which the perpetrator was seemingly trapped?

These hypotheses often elicit the following challenge: it is all well and good for psychiatrists to offer diverse explanations for adolescent parricides, but a legal system is concerned about justice and whether there are sufficient circumstances to mitigate a murder conviction. Therefore, diverse clinical formulations are interesting, but may not be sufficient in a courtroom unless there is an explicit mental disorder. However, an attorney who has represented many battered women at trial does not see self-defense as so confining.[27] There are other types of defense, such as duress.[28] The duress argument is that continuing threats and humiliation lead the adolescent to believe that death is imminent and the only way to avoid it is to engage in behavior that, in a literal sense, violates criminal law. Duress can be seen as the reason that an adolescent ultimately overcomes his moral controls and engages in homicidal behavior.

Further, an imminent need for self-defense need not mean an immediate threat to one's life, but that one is living in a state of not knowing when his or her life may be in danger. In that sense, killing may be a reasonable act for an adolescent who lives in an uncertain state of maltreatment and feels helpless, with unremitting shame. Objectivity regarding any such defense requires a thorough forensic examination that elicits details about the adolescent's specific situation, the relative size and strength of the parties, emotional and physical disabilities, and ongoing acts and threats of violence.[29]

Many parricides are, in part, a protest against continuing humiliation. To assert that an adolescent is a helpless creature and has lost the capacity to make choices extends the justification of impaired mental functioning beyond what can clinically be confirmed.[30] It is not that abused adolescents have lost the capacity to choose, but rather that they have opted to escape what they perceive as being trapped in a situation in which an abuser can periodically attack them. Emotions and mindset are crucial, since they lay the groundwork for a homicide. The focus then shifts from how bad or evil a parental abuser may have been *per se* to an unraveling of what developed in the emotions and thinking of the adolescent.

Adolescent parricides reveal that community intervention either has not worked or has not been available. When the endpoint is reached, the adolescent concludes that only two options are left: main-

tain the *status quo* of living in humiliation or take action. The action is not necessarily to escape immediate life-threatening harm but to stop the degradation in their lives, which they see as unending. According to their thinking, they are making a reasonable attempt at survival and no longer having to hide from humanity.[31]

Hypotheses Regarding Adolescent Parricide

Rather than PTSD's being the key element in adolescent parricide, the hypothesis is raised that shaming and its reflection on the self as good or bad are central.[32,33] The psychopathology of shame elicits humiliation in contrast to guilt.[34] The resultant self-assessment is that of being small and powerless.[35] Even trivial incidents may induce shame that the individual has trouble acknowledging. A similar disproportion has been witnessed in studies of exaggerated acts of violence by prisoners or mentally disordered offenders.[36] Adolescents who commit a parricide may analogize their situation to a suicide.[37] Disappointments in not meeting standards leave them feeling deficient with a need to deal with self-contempt. Suicide is one way out, parricide another. Initially, there may be a dysphoric state. When aversiveness shifts from the self to the abusive parent, the shift is from suicide to parricide.

In the young, shame-induced fantasies instigate vengeful states of mind.[38] Repeated humiliations accumulate and contribute to a need for vengeance. When the person reaches adolescence, the increase in aggression presents more options. Fantasies of revenge give an illusion of strength in contrast to helplessness.[39] Vindictiveness is seen as justified.[40] It is desirable for the psychiatrist to try to understand what brought matters to such a point of finality, what defenses held it in check up to that point, and how a state of vengefulness translates into action, whatever the consequences. By then, matters have progressed beyond forgiveness.

The humiliated adolescent who becomes preoccupied with vengefulness senses an option for a relief of dysphoric feelings. However, there is also a means of overcoming a state of powerlessness by a sense of power. Rather than reflecting on the consequences of an act, there is an ego-syntonic sense of achieving justice. Pursuing justice thus has a moral theme, not only that the potential victim has it coming, but that future shameful humiliations will end. The result is a compromised view of reality. The act is justified by the belief that the humiliation will not end otherwise. The adolescent feels entitled to administer not only a proportionate punishment but a final solution to the problem. The result is a failure in moral regulation.

There is also the recurrent question of why simply humiliating a parent would not suffice. The answer contains a partial explanation of why most of those who are abused do not kill. For the minority who do kill, repeated humiliations cause them to feel emotionally destroyed, left in a limbo of continued abuse and humiliation. Once the belief has become fixed that nothing will change, the need to take action becomes more compelling. Not to carry out the killing, but to do something less, leaves the individual with a sense of unrelieved shame and powerlessness and no assurance that the problem will be resolved. The solution is a breakthrough of murderous rage accompanied by a feeling of moral justification. The dehumanized abuser must be destroyed. Evaluations of these individuals after a parricide show a relative calm with a seemingly incomprehensible absence of remorse.

Conclusion

Adolescent parricides do not usually show the clinical signs and symptoms of a psychotic disorder, in contrast to adult parricidal acts. Further, the nonconfrontational nature of many adolescent parricides makes arguing self-defense difficult, although not impossible if an expanded view of being in imminent danger is allowed. A proposed alternative conceptual model stresses the relationship of enduring patterns of shame to a parricide that can fit in with a legal view of duress in response to perceived chronic humiliation. The focus then shifts to the roles of shame and rage rather than a PTSD outcome as seen in BWS.

When asked subsequent to a parricide whether they were aware of feeling shamed by a parent, most adolescents reply in terms of anger, resentment, or a feeling of injustice. Scheff and Retzinger[41] noted how unacknowledged shame quickly changes into rage. In the shame-rage cycle, shame is an unconscious process that instigates violent behavior, in contrast to an overt and conscious experience of shame.[42] The stage is set by a painful state of disgrace, feeling mocked, or feeling rejected. Better to rid the self of such ruminations by rendering the abuser powerless. To paraphrase the individual's mental state, "Even if I die in the attempt to rid

myself of my abuser, it is better than continuing the *status quo*." In fact, a vicarious killing of the self can be followed by long periods of incapacitation, which sabotage the person's life. In the compelling need to act, assessments of the consequences of the behavior are ignored. The incapacity to forgive the abuser, with the unresolved sense of shame and humiliation, ultimately is a response to a narcissistic wound. The injury and sense of injustice overcome moral controls and drive the parricide, a final act of narcissistic rage.

References

1. Hillbrand H, Alexandre JW, Young JO, *et al*: Parricides: characteristics of offenders and victims, legal factors, and treatment issues. Aggress Violent Behav 4:179–90, 1999
2. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington, DC: American Psychiatric Association, 2000
3. Heide KM, Petee TA: Parricide/an empirical analysis of 24 years of US data. J Interpers Violence 22:1382–99, 2007
4. Heidi KM, Petee TA: Weapons used by juveniles and adult offenders in US parricide cases. J Interpers Violence 22:1400–14, 2007
5. Bourget D, Gagné P, Labelle M: Parricide: a comparative study of matricide versus patricide. J Am Acad Psychiatry Law 35:306–12, 2007
6. Hillbrand M, Cipriano T: Commentary: parricides—unanswered questions, methodological obstacles, and legal considerations. J Am Acad Psychiatry Law 35:313–16, 2007
7. State v. MacLennan, 702 N.W.2d 219 (Minn. 2005)
8. Jahnke v. State, 682 P.2d 991 (Wyo. 1984)
9. State v. Janes, 822 P.2d 1238 (Wash. Ct. App. 1992)
10. State v. Nemeth, 694 N.E.2d 1332 (Ohio 1998)
11. Cicchetti D, Toth SL: Child maltreatment. Ann Rev Clin Psychol 1:409–38, 2005
12. Sameroff AJ: Developmental systems and psychopathology. Dev Psychopathol 12:297–312, 2000
13. Cicchetti D, Dawson G: Multiple levels of analysis. Dev Psychopathol 14:417–66, 2002
14. National Research Council: Understanding Child Abuse and Neglect. Washington, DC: National Academy Press, 1993
15. Storr CL, Ialongo NS, Anthony JC, *et al*: Childhood antecedents of exposure to traumatic events and posttraumatic stress disorder. Am J Psychiatry 164:119–25, 2007
16. Kessler RC, Sonnega A, Bromet E, *et al*: Posttraumatic stress disorder in the National Comorbidity Survey. Arch Gen Psychiatry 52:1048–60, 1994
17. Copeland WE, Keeler G, Angold A, *et al*: Traumatic events and posttraumatic stress in childhood. Arch Gen Psychiatry 64:577–84, 2007
18. Gunnar MR, Vazquez D: Stress neurobiology and developmental psychopathology, in Developmental Psychopathology (ed 2). Edited by Cicchetti D, Cohen DJ. New York: John Wiley & Sons, 2006, pp 533–77
19. vam Goozen SHM, Fairchild G, Snoek H, *et al*: The evidence for a neurobiological model of childhood antisocial behavior. Psych Bull 133:149–82, 2007
20. Spear LL: The developing brain and adolescent-typical behavior patterns, in Adolescent Psychopathology and the Developing Brain. Edited by Romer D, Walker EF. New York: Oxford University Press, 2007, pp 9–30
21. Heide KM, Solomon EP: Biology, childhood trauma, and murder: rethinking justice. Int J Law Psychiatry 29:220–33, 2006
22. Chancer LS: High-Profile Crimes: When Legal Cases Become Social Causes. Chicago: University of Chicago Press, 2005
23. State v. Smullen, 844 A.2d 429 (Md. 2004)
24. Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137 (1999)
25. Walker L: The Battered Woman Syndrome. New York: Springer, 1984
26. Stein A: Prologue to Violence. Mahwah, NJ: The Analytic Press, 2007
27. Maguigan H: Battered women and self-defense: myths and misconceptions in current reform proposals. Univ Penn L Rev 140: 379–486, 1991
28. Dressler J: Battered women and sleeping abusers: some reflections. Ohio State J Crim Law 3:457–71, 2006
29. Krause JH: Distorted reflections of battered women who kill: a response to Professor Dressler. Ohio State J Crim Law 4:555–72, 2007
30. Seligman M: Helplessness: On Depression, Development, and Death. New York: WH Freeman, 1975
31. Nussbaum MC: Hiding from Humanity: Disgust, Shame, and the Law. Princeton, NJ: Princeton University Press, 2004
32. Lewis HBL: Shame and Guilt in Neurosis. New York: International University Press, 1971
33. Tangney JP, Dearing R: Shame and Guilt. New York: Guilford, 2003
34. Wilson JP, Drozdek B, Turkovic S: Posttraumatic shame and guilt. Trauma Violence Abuse 7:122–41, 2007
35. Tangney JP, Stuewig J, Mashek DJ: Moral emotions and moral behavior. Ann Rev Psychol 58:345–72, 2007
36. Gilligan J: Violence: Our Deadly Epidemic and Its Causes. New York: GP Putnam, 1996
37. Dutton DG, Yamini S: Adolescent parricide: an integration of social cognitive theory and clinical views of projective-introjective cycling. Am J Orthopsychiatry 65:39–47, 1995
38. Lansky M: The impossibility of forgiveness: shame fantasies as instigators of vengefulness in Euripides' *Medea.* J Am Psychoanal Assoc 53:437–64, 2005
39. Horowitz MJ: Understanding and ameliorating revenge fantasies in psychotherapy. Am J Psychiatry 164:24–7, 2007
40. Horney K: The value of vindictiveness. Am J Psychoanal 8:3–12, 1948
41. Scheff T, Retzinger S: Helen Block Lewis on shame: appreciation and critique, in The Widening Scope of Shame. Edited by Lansky MR, Morrison AP. Hillsdale, NJ: The Analytic Press, 1997, pp 139–54
42. Lansky M: Unbearable shame, splitting, and forgiveness in the resolution of vengefulness. J Am Psychoanal Assoc 55:571–93, 2007