CME ACTIVITY

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CME Objectives
After completing this CME activity, the psychiatrist should be able to:
- Discuss the relationship between sexual violence and mental illness
- Recognize major psychiatric disorders among sex offenders
- Assess what impact the treatment of psychiatric disorders in sex offenders may have on rehabilitation, public victimization, and the public's health and economics

Statement of Need and Purpose
Physicians responding to articles in *The Journal of Clinical Psychiatry* and its related CME activities have indicated a need to know more about the psychiatric features associated with patients who have a history of violent sexual offenses. This CME enduring material presents current information to address that need. There are no prerequisites for participating in this CME activity.

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Psychiatric Features of 36 Men Convicted of Sexual Offenses

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Background: To increase understanding of the relationship between sexual violence and mental illness, the authors assessed the legal histories and psychiatric features of 36 males convicted of sexual offenses.

Method: Thirty-six consecutive male sex offenders admitted from prison, jail, or probation to a residential treatment facility received structured clinical interviews for DSM-IV Axis I and II disorders. The participants' legal histories, histories of sexual and physical abuse, and family histories of psychiatric disorders were also assessed.

Results: The participants' mean ± SD age was 33 ± 8 years. They had been convicted a mean of 1.8 ± 1.4 times (range, 1–9 times) for sexual offenses and incarcerated a mean of 8 ± 6 years (range, 0–22 years). Participants displayed high rates of lifetime DSM-IV Axis I disorders: 30 (83%) had a substance use disorder; 21 (58%), a paraphilia; 22 (61%), a mood disorder (13 [36%] with a bipolar disorder); 14 (39%), an impulse control disorder; 13 (36%), an anxiety disorder; and 6 (17%), an eating disorder. Participants also displayed high rates of Axis II disorders, with 26 (72%) meeting DSM-IV criteria for antisocial personality disorder. In addition, subjects reported experiencing high rates of sexual (but not physical) abuse and high rates of Axis I disorders, especially substance use and mood disorders, in their first-degree relatives. Compared with subjects without paraphilias, subjects with paraphilias displayed statistically significantly higher rates of mood, anxiety, and eating disorders, as well as significantly higher rates of childhood sexual abuse.

Conclusion: Recognition and treatment of major psychiatric disorders among sex offenders may increase chances for successful rehabilitation, reduce recidivism and public victimization, and produce significant public health and economic benefits. More studies in this area appear warranted to search for more effective interventions for this severe public health problem.

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Rape, incest, and other forms of sexual violence are enormous societal and public health problems. In 1993, according to the U.S. Department of Justice National Crime Victimization Survey, 485,290 Americans were victims of rape, attempted rape, or other forms of sexual assault.[1] Also in 1993, the Department of Justice estimated that there were 1238 federal prisoners and 81,400 state prisoners sentenced for rape and other sexual assaults. More recently, a general population survey among a random sample of 9953 residents of Ontario, Canada, aged 15 years and older found that 11.1% of females and 3.9% of males reported a history of severe sexual abuse.[2]

Extensive research has documented a relationship between violent crime and mental illness.[3–12] Studies have demonstrated elevated rates of violent behavior and violent crime among persons in the community with psychotic disorders, mood disorders (especially bipolar disorder), substance use disorders, and antisocial personality disorder. Conversely, elevated rates of psychotic, mood, substance use, and personality disorders have been found among persons who commit violent crimes. Despite these data, very little systematic research has examined the relationship between sexual violence and mental illness.

Specifically, there have been few systematic studies of the psychiatric diagnoses of persons who commit sexual

crimes. Available studies suggest that a substantial proportion of sex offenders may have a wide range of psychiatric disorders,[13–33] including paraphilias,* substance use disorders,[14,16,23,24,26,31,32] mood disorders,[15,25,27,33] psychotic disorders,[15,17,18] and personality and/or conduct disorders.[14,16,17,21,24,32,33] Moreover, preliminary phenomenological, comorbidity, and treatment response data suggest that paraphilias may be related to other major psychiatric disorders, especially mood, obsessive-compulsive, impulse control, and substance use disorders.[34–47]

The existing studies of psychiatric disorders in sex offenders have numerous methodological limitations, including small sample sizes, lack of use of diagnostic criteria and structured clinical interviews, and evaluation of limited diagnostic categories. Indeed, these studies are inconsistent as to which types of psychiatric disorders are more common in sex offenders, with many studies reporting high rates of paraphilias,[16,20,23,24,28–31,33] and others reporting relatively low rates of these disorders but high rates of personality and/or conduct disorders.[17,21] Some studies report high rates of mood and/or psychotic disorders among sex offenders,[15,17,18,27,33] whereas others report low rates of these disorders.[14,16,21,31] It is therefore presently unknown how commonly sexual crime is associated with paraphilias, severe mental disorders, personality disorders, or various combinations of these disorders.

Knowledge of the types and prevalence of various psychiatric disorders in sex offenders is important for several reasons. First, a better understanding of the relationship between sexual violence and mental illness might enable the development of more effective legal, correctional, and public health policies regarding persons who commit sexual crimes.[48–50] Second, psychopharmacologic treatment of appropriate psychiatric disorders in affected sex offenders, administered in conjunction with correctional and psychosocial treatment programs, might increase the likelihood of successful rehabilitation and thereby reduce recidivism, public victimization, and the use of more costly correctional services. Third, risk factors and preventative strategies for sexual violence might be identified and developed. To characterize the psychiatric features of persons who commit sexual crimes further, we report here on the legal histories and psychiatric evaluations of 36 men convicted of sexual crimes consecutively referred from prison, jail, or probation to a residential treatment program for sex offenders.

*References 14, 16, 20, 23, 24, 28–31, 33.

METHOD

The Volunteers of America (VOA)/Ohio River Valley New Life Program is a 25-bed halfway house in downtown Cincinnati that provides comprehensive biopsychosocial treatment to male sex offenders paroled from prisons or jail or on probation in Ohio. The program is affiliated with the Biological Psychiatry Program at the Department of Psychiatry, University of Cincinnati. The admission criteria for the New Life Program are (1) male sex; (2) age 18 years or older; (3) conviction for at least 1 sexual offense; (4) admission by the individual that he has, in fact, committed the offense; (5) IQ ≥ 70; and (6) voluntary agreement to participate in an 18-month rehabilitation program. Persons who have committed "lust murder" (murder in the course of sexual assault) are not eligible for participation. Before a potential candidate is accepted into the New Life Program, several VOA staff members explain to him that the program provides biopsychosocial treatment, which includes a comprehensive psychiatric evaluation. Upon acceptance, the candidate voluntarily agrees to participate in the program by signing a written informed consent document. It is explained to the participant both verbally and in the informed consent document that the results of psychiatric evaluations will be published anonymously in clinical research reports.

Upon admission to the program, all participants receive the following psychiatric evaluation: (1) a review of their legal histories of sexual and nonsexual offenses; (2) the Structured Clinical Interview for DSM-IV[51] Axis I Disorders (SCID-I/P),[52] augmented with modules for DSM-IV impulse control disorders not elsewhere classified and paraphilias (available from the authors upon request); (3) the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II)[53]; (4) history of sexual and physical abuse; and (5) history of psychotic, mood, anxiety, eating, substance use, impulse control, and paraphiliac disorders in first-degree relatives determined via the family history method.[54] These assessments are supplemented by examination of medical and legal records and polygraph examinations. Due to the high rate of symptom denial (especially sexual symptoms) during the initial phase of treatment, we wait several weeks to several months before determining "consensus" DSM-IV diagnoses.

All statistical analyses were performed with SAS software for the personal computer, version 6.03 (SAS Institute, Cary, N.C., 1992). Given the small sample size, only nonparametric tests were performed. Specifically, categorical variables were compared by using the 2-tailed

Table 1. Demographic Features and Legal Histories of 36 Sex Offenders With (N = 21) and Without (N = 15) Paraphilias

Feature	Total	With Paraphilias	Without Paraphilias
Age, y, mean ± SD	33 ± 8	32 ± 8	34 ± 7
Range	18–47	18–47	21–44
Number of sexual crime convictions			
Mean ± SD	1.8 ± 1.4	2 ± 1.7	1.3 ± 0.7
Range	1–9	1–9	1–3
Total time in prison, y, mean ± SD	8 ± 6	7 ± 6	10 ± 6
Range	0–22	0–18	1–22
Number of sexual victims per subject[a,b]			
Mean ± SD	5 ± 7	8 ± 8	2 ± 1
Range	1–27	1–27	1–5
Age at first sexual crime, y, mean ± SD	18 ± 7	17 ± 7[c]	20 ± 5
Age at first sexual conviction, y			
Mean ± SD	23 ± 6	23 ± 7[d]	22 ± 4
Sexual crimes, N (%)			
Rape or attempted rape of adult			
Convicted of	7 (19)	2 (10)	5 (33)
Admitted to	10 (28)	5 (24)	5 (33)
Rape or attempted rape of minor			
Convicted of	13 (36)	9 (43)	4 (27)
Admitted to	22 (61)	17 (81)	5 (33)
Gross sexual imposition of adult[e]			
Convicted of	8 (22)	4 (19)	4 (27)
Admitted to	8 (22)	4 (19)	4 (27)
Gross sexual imposition of minor[f]			
Convicted of	17 (47)	13 (62)	4 (27)
Admitted to	21 (58)	16 (76)	5 (33)
Voyeurism, public indecency, stalking, obscene phone calls	4 (11)	4 (19)	0 (0)
Kidnapping, abduction, coercion	4 (11)	3 (14)	1 (7)
Prostitution or related offense[g]	2 (6)	0 (0)	2 (13)
Abused adults only	9 (25)	2 (10)	7 (47)
Abused children only	22 (61)	15 (71)	7 (47)
Abused children and adults	5 (14)	4 (19)	1 (7)
Nonsexual crimes, N (%)			
Theft, burglary, robbery, larceny[h]	27 (75)	14 (67)	13 (87)
Assaults against people[i]	16 (44)	8 (38)	8 (53)
Destruction of property[j]	8 (22)	3 (14)	5 (33)
Drug, gambling, or arms violation[k]	13 (36)	8 (38)	5 (33)
Serious violation of rules[l]	9 (25)	5 (24)	4 (27)
Juvenile violations[m]	7 (19)	2 (10)	5 (33)
Any	33 (92)	19 (90)	14 (93)

[a]Excluding 3 participants with voyeurism (2000 victims), pedophilia (400 victims), and no paraphilia (250 victims).
[b]Offenders with paraphilias had more sexual victims than offenders without paraphilias ($z = 3.6$, $df = 1$; $p < .001$).
[c]Offenders with paraphilias were younger than offenders without paraphilias when they committed their first sexual offense (by their own admission) ($z = 2.2$, $df = 1$; $p = .03$).
[d]Offenders with paraphilias went for statistically significantly longer periods of time than offenders without paraphilias prior to their first apprehension for a sexual offense ($z = 3.3$, $df = 1$; $p = .001$).
[e]Includes sexual battery, felonious sexual penetration, and carnal knowledge.
[f]Includes sexual battery, corruption of a minor, and felonious sexual penetration.
[g]Includes soliciting and promoting prostitution.
[h]Includes receiving stolen property, breaking and entering, trespassing, bad checks, bad credit, unauthorized use of property.
[i]Includes assault, domestic violence, disorderly conduct, and menacing.
[j]Includes arson and criminal damaging.
[k]Includes carrying a concealed weapon, driving under the influence, possession of an illegal substance, and alcohol violations.
[l]Includes resisting arrest, delinquency.
[m]Includes truancy; incorrigible, unruly, ungovernable behavior; and curfew violation.

Fisher exact test, and continuous variables were compared by using the Wilcoxon rank sum test. For analysis of rates of psychiatric disorders, only general categories (e.g., mood disorders) were compared to limit the number of comparisons.

RESULTS

Thirty-six of 37 convicted sex offenders consecutively admitted to the New Life Program between November 1996 and July 1998 received complete evaluations. One person escaped from the facility (and was returned to prison) before he was evaluated by our team.

The legal histories of the 36 men are summarized in Table 1. The participant mean ± SD age was 33 ± 8 years (range, 18–47 years). By history, 10 participants (28%) admitted to having raped or attempting to rape an adult, and 20 (56%) admitted to having raped or attempting to rape a child. The mean ± SD age at onset of sexual offending behavior was 18 ± 7 years (range, 7–39 years), the mean ± SD age at onset of first legal problem related to sexual offending behavior was 23 ± 6 years (range, 11–39 years), and the mean ± SD number of victims per participant was 23 ± 76 persons (range, 1–400 persons). Most of the men (33/36; 92%) reported nonsexual legal problems in addition to their sexual offenses.

As shown in Table 2, participants displayed very high rates of lifetime DSM-IV Axis I disorders. Thirty-five men (97%) met DSM-IV criteria for 1 or more lifetime Axis I disorder, and 28 (78%) met criteria for 3 or more disorders. Regarding specific disorders in descending order of frequency, 30 subjects (83%) met DSM-IV criteria for a lifetime diagnosis of a psychoactive substance use disorder, 21 (58%) for a paraphilia, 22 (61%) for a mood disorder (with 13 [36%] meeting criteria for a bipolar disorder), 14 (39%) for an impulse control disorder, 13 (36%) for an anxiety disorder, and 6 (17%) for an eating disorder.

Of the 21 subjects with paraphilias, 17 subjects (81%) met criteria for lifetime diagnoses of pedophilia, 9 (43%) for frotteurism, 4 (19%) for sexual sadism, 3 (14%) for voyeurism, and 3 (14%) for paraphilia not otherwise specified (NOS). Three subjects also met criteria for sexual disorder NOS. The mean ± SD age at onset of paraphilias (defined as meeting DSM-IV criteria, except for the age requirement) was 16 ± 7 years (range, 7–38 years). Twelve subjects (57%) met criteria for 1 paraphilia, 6 (29%) for 2 paraphilias, and 3 (14%) for 3 paraphilias.

As shown in Table 3, subjects also displayed very high rates of Axis II disorders. Thirty-four men (94%) met

Table 2. Lifetime DSM-IV Diagnoses in 36 Convicted Sex Offenders With (N = 21) and Without (N = 15) Paraphilias

	Total		With Paraphilias		Without Paraphilias	
Diagnosis	N	%	N	%	N	%
Mood disorders						
Major depressive	8	22	7	33	1	7
Bipolar I	6	17	5	23[a]	1	7
Bipolar II	4	11	2	10	2	13
Bipolar NOS	3	8	2	10	1	7
Cyclothymia	1	3	0	0	1	7
Total	22	61	16	76[b]	6	40
Substance abuse						
Alcohol	22	61	14	67	8	53
Drug	27	75	14	67	13	87
Total[c]	30	83	16	76	14	93
Anxiety disorders						
Generalized anxiety disorder	1	3	1	5	0	0
Panic disorder	2	6	2	10	0	0
Social phobia	6	17	4	19	2	13
Simple phobia	1	3	1	5	0	0
Obsessive-compulsive disorder	4	11	4	19	0	0
Posttraumatic stress disorder	6	17	6	29	0	0
Total[c]	13	36	11	52[d]	2	13
Eating disorders						
Bulimia nervosa	1	3	1	5	0	0
Binge-eating disorder	5	14	5	24	0	0
Total[c]	6	17	6	29[e]	0	0
Impulse control disorders						
Kleptomania	1	3	1	5	0	0
Pathological gambling	3	8	3	14	0	0
Trichotillomania	1	3	1	5	0	0
Compulsive buying	5	14	4	19	1	7
Compulsive skin picking	1	3	1	5	0	0
Intermittent explosive disorder	7	19	4	19	3	20
Impulsive control disorder NOS	1	3	0	0	1	7
Total[c]	14	39	10	48	4	27
Paraphilias						
Frotteurism	9	25	9	43	0	0
Pedophilia	17	47	17	81	0	0
Sexual sadism	4	11	4	19	0	0
Voyeurism	3	8	3	14	0	0
NOS	3	8	3	14	0	0
Total[c]	21	58	21	100	0	0
Sexual disorder NOS	3	8	2	10	1	7

[a]One patient had schizoaffective disorder, bipolar type.
[b]Mood disorders were significantly more common in offenders with paraphilias than in offenders without paraphilias: p = .04, 2-tailed Fisher exact test.
[c]Total is sometimes less than the sum of the individual disorders because many patients had more than 1 disorder in the category.
[d]Anxiety disorders were significantly more common in offenders with paraphilias than in offenders without paraphilias: p = .03, 2-tailed Fisher exact test.
[e]Eating disorders were significantly more common in offenders with paraphilias than in offenders without paraphilias: p = .03, 2-tailed Fisher exact test.

Table 3. DSM-IV Axis II Disorders in 36 Male Sex Offenders With (N = 21) and Without (N = 15) Paraphilias

	Total		With Paraphilias		Without Paraphilias	
Disorder	N	%	N	%	N	%
Cluster A						
Paranoid	10	28	7	33	3	20
Schizoid	0	0	0	0	0	0
Schizotypal	0	0	0	0	0	0
Total	10	28	7	33	3	20
Cluster B						
Antisocial	26	72	15	71	11	73
Borderline	15	42	11	52	4	27
Histrionic	2	6	1	5	1	7
Narcissistic	6	17	3	14	3	20
Total[a]	33	92	20	95	13	87
Cluster C						
Avoidant	8	22	8	38	0	0
Dependent	3	8	3	14	0	0
Obsessive-compulsive	9	25	6	29	3	20
Total[a]	13	36	10	48	3	20

[a]Total is less than the sum of the individual disorders because some subjects had more than 1 disorder in the category.

DSM-IV criteria for at least 1 Axis II disorder, and 12 (33%) met criteria for 3 or more. The most commonly displayed Axis II disorders were cluster B: 26 subjects (72%) met criteria for antisocial personality disorder, 15 (42%) for borderline personality disorder, and 6 (17%) for narcissistic personality disorder.

Twenty-one subjects (58%) reported experiencing sexual abuse during childhood. Ten of these subjects reported being victims of incest. The perpetrators of incest were reported to be the father (N = 3), uncle (N = 2), cousin (N = 1), brother (N = 2), sister (N = 1), and for 1 subject, his father, mother, uncle, 2 sisters, and 2 brothers. Only 5 subjects (14%) reported experiencing physical abuse during childhood.

History of psychiatric disorders was obtained for 223 first-degree relatives aged 16 years or older of the 36 subjects. Twenty-four subjects (67%) had at least 1 first-degree relative with a substance use disorder, 9 subjects (25%) had at least 1 first-degree relative with a mood disorder, 5 subjects (14%) had at least 1 first-degree relative with an impulse control disorder, and 4 subjects (11%) had at least 1 first-degree relative with a paraphilia (1 subject's father had zoophilia and 3 subjects had at least 1 first-degree relative with pedophilia). No subjects had a first-degree relative with an anxiety or an eating disorder.

Since many, but not all, studies of the psychopathology of sex offenders find high rates of paraphilias among these individuals, offenders with paraphilias were compared with those without paraphilias (see Tables 1–3). As

shown in Table 1, offenders with paraphilias were significantly younger when they committed their first sexual crime ($z = 2.2$, $df = 1$; $p = .03$), had offended for significantly longer periods of time prior to their first apprehension ($z = 3.3$, $df = 1$; $p = .001$), and reported significantly more victims ($z = 3.6$, $df = 1$; $p < .001$). As shown in Table 2, offenders with paraphilias were more likely to have comorbid mood ($p = .04$), anxiety ($p = .03$), and eating ($p = .03$) disorders than those without paraphilias. In the 15 subjects who met lifetime DSM-IV criteria for both a paraphilia and a mood disorder, the onset of the mood disorder preceded the onset of the paraphilia in 7 subjects, occurred with the paraphilia in 1 subject, and occurred after the onset of the paraphilia in 7 subjects. In the 10 subjects who met lifetime DSM-IV criteria for both an anxiety disorder and a paraphilia, the onset of the anxiety disorders preceded the onset of the paraphilia in 7 subjects, occurred with the paraphilia in 1 subject, and occurred after the onset of the paraphilia in 2 subjects.

As shown in Table 3, we found no statistically significant difference in the rates of Axis II disorders among offenders with and without paraphilias. Offenders with paraphilias were, however, statistically significantly more likely to have a history of childhood sexual abuse or incest than offenders without paraphilias ($p = .02$).

DISCUSSION

Consistent with other studies of sex offenders, the sexual offending behavior in this group of men began early in life, was usually repetitive, and was associated with other criminal behaviors. This group of men also displayed very high rates of Axis I and Axis II disorders previously reported to be common in other studies of sex offenders, including substance use disorders, paraphilias, mood disorders, and antisocial personality disorder. Indeed, the majority of these men displayed multiple Axis I and Axis II disorders, and relatively high rates of impulse control, anxiety, and eating disorders were also found. Among those subjects with mood disorders, bipolar disorders were surprisingly just as common as depressive disorders. Moreover, subjects with paraphilias displayed higher rates of mood, anxiety, and eating disorders and histories of sexual abuse than those without paraphilias.

To our knowledge, this report is the first to note an association among paraphilias and mood, anxiety, and eating disorders in a group of men convicted of committing sexual crimes. This finding suggests that a subset of men who commit sexual crimes may have paraphilias in combination with mood, anxiety, and/or eating disorders. This, in turn, suggests that men who commit sexual crimes, especially those who present with affective, anxiety, or eating disorder symptoms, should be carefully evaluated for paraphilias, even if they initially deny such symptoms. Conversely, sex offenders with paraphilias should be carefully assessed for mood, anxiety, and eating disorders.

It is very important to note that this report has serious methodological limitations. These limitations include its small sample size, evaluation of psychiatric diagnoses by unblinded investigators, and lack of a control group (including a non–sex offender forensic group). The pattern of Axis I and/or Axis II comorbidity described, therefore, may not be specific for sex offenders and may be found in non–sex offender forensic populations as well. Also, subjects were participants referred from prison, jail, or probation to enter a voluntary treatment program. It is therefore unknown how representative the subjects in our cohort are of sex offenders in general. The high rates of Axis I disorders found in our cohort could very likely reflect recruitment bias.

Another limitation of this study is the high incidence of underreporting of deviant sexual fantasies and behaviors and of sexual and nonsexual criminal behaviors by persons who have committed sexual crimes.[25] In an attempt to minimize this problem, we performed multiple clinical interviews supplemented with polygraph examinations and referred to legal records, which included victims' statements and the participants' "autobiographies" and "victim lists." Nonetheless, it is likely that the degree of sexual psychopathology in this cohort may have been underestimated.

Another limitation of this study is the definitional overlap among many of the diagnostic categories assessed. For example, there is considerable overlap among the DSM-IV diagnostic criteria for bipolar disorder, some impulse control disorders, and borderline and antisocial personality disorders. It is therefore possible that some participants were misclassified as having 1 or more of these or other disorders.

A related limitation is that we did not assess certain psychiatric disorders. Specifically, we did not assess past histories of various childhood externalizing disorders, such as attention-deficit/hyperactivity disorder, which may have led to a falsely elevated rate of bipolar disorders. Nor did we systematically assess psychopathy as it has been empirically defined by Hare and colleagues as (1) a remorseless disregard for the rights and feelings of others and (2) a pattern of chronic antisocial behavior.[55] (Preliminary research has shown that antisocial personality disorder, as defined by DSM-IV, and psychopathy, as

defined by Hare et al., are not completely overlapping constructs.[55,56])

Yet another limitation of this study is that neurologic status beyond medical history and physical examination was not assessed. Patients did not receive electroencephalograms, brain computed tomography scans, or brain magnetic resonance imaging. Other studies suggest that some sexually aggressive men may have neurologic or brain abnormalities.[57,58] It is therefore possible that some of the psychopathology found in this group of men would be better accounted for by mental disorders due to general medical conditions (i.e., organic or secondary mental disorders) rather than primary psychiatric disorders.

Despite these limitations, our findings are consistent with previous observations that persons who commit sexual crimes may have high rates of various types of psychiatric disorders. A more precise understanding of the mental disorders of persons who perform harmful sexual behaviors would have important clinical, legal, public health, and theoretical implications. Further studies of the prevalence of specific psychiatric disorders and of the relationships among those disorders in larger and broader populations of sex offenders appear warranted.

Disclosure of off-label usage: The authors of this article have determined that, to the best of their knowledge, no investigational information about pharmaceutical agents has been presented herein that is outside Food and Drug Administration–approved labeling.

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Instructions

Psychiatrists may receive 1 hour of Category 1 credit toward the American Medical Association Physician's Recognition Award by reading the article starting on page 414 and correctly answering at least 70% of the questions in the posttest that follows.

1. Read each question carefully and circle the correct corresponding answer on the Registration form.
2. Type or print your full name and address and Social Security, phone, and fax numbers in the spaces provided.
3. Mail the Registration form along with a check, money order, or credit card payment in the amount of $10 to: Physicians Postgraduate Press, Office of CME, P.O. Box 752870, Memphis, TN 38175-2870.
4. For credit to be received, answers must be postmarked by the deadline shown on the CME Registration form. After that date, correct answers to the posttest will be printed in the next issue of the *Journal*.

All replies and results are confidential. Answer sheets, once graded, will not be returned. Unanswered questions will be considered incorrect and so scored. Your exact score can be ascertained by comparing your answers with the correct answers to the posttest, which will be printed in the *Journal* issue after the submission deadline. The Physicians Postgraduate Press Office of Continuing Medical Education will keep only a record of participation, which indicates the completion of the activity and the designated number of Category 1 credit hours that have been awarded.

1. The most common DSM-IV Axis I disorder category in this group of 36 men convicted of sexual offenses was:
a. Paraphilias
b. Substance use disorders
c. Mood disorders
d. Impulse control disorders

2. The second most common Axis I disorder category in this group of 36 men convicted of sexual offenses was:
a. Paraphilias
b. Substance use disorders
c. Mood disorders
d. Impulse control disorders

3. The percentage of men in this group of 36 convicted sex offenders who met DSM-IV criteria for at least one paraphilia was:
a. 32%
b. 44%
c. 58%
d. 74%

4. The most common paraphilia found among this group of 36 convicted sex offenders was:
a. Frotteurism
b. Voyeurism
c. Pedophilia
d. Sexual sadism

5. The most common DSM-IV Axis II disorder found in this group of 36 convicted sex offenders was:
a. Borderline personality disorder
b. Paranoid personality disorder
c. Antisocial personality disorder
d. Narcissistic personality disorder

6. In this group of 36 convicted sex offenders, compared with offenders without paraphilias, offenders with paraphilias were more likely to have comorbid:
a. Mood disorders
b. Anxiety disorders
c. Eating disorders
d. All of the above

7. Important limitations of this study include all of the following *except:*
a. Small sample size, likely recruitment bias, and unknown generalizability of findings
b. Lack of use of diagnostic criteria and structured interviews to assess psychiatric diagnosis
c. High incidence of underreporting of deviant sexual fantasies and behaviors by persons who have committed sexual crimes
d. Nonassessment of certain psychiatric disorders, such as childhood externalizing disorders and some mental disorders due to medical conditions

Answers to the December 1998 CME posttest

1. b 2. c 3. a 4. e 5. c 6. a 7. b 8. d

Circle the one correct answer for each question.

1.	a	b	c	d
2.	a	b	c	d
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6.	a	b	c	d
7.	a	b	c	d

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3. Was the format of this activity appropriate for the content being presented? ❑ Yes ❑ No

4. Did the method of presentation hold your interest and make the material easy to understand? ❑ Yes ❑ No

5. Achievement of educational objectives:
   A. Enabled me to discuss the relationship between sexual violence and mental illness. ❑ Yes ❑ No
   B. Enabled me to recognize major psychiatric disorders among sex offenders. ❑ Yes ❑ No
   C. Enabled me to assess what impact the treatment of psychiatric disorders in sex offenders may have on rehabilitation, public victimization, and the public's health and economics. ❑ Yes ❑ No

6. Did this CME activity provide a balanced, scientifically rigorous presentation of therapeutic options related to the topic, without commercial bias? ❑ Yes ❑ No

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