CME ACTIVITY

Sponsored by Physicians Postgraduate Press, Inc.

This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education. To obtain credit, please read the following article and complete the posttest as instructed on page 397.

CME Objectives

After completing this CME activity, the psychiatrist should be able to:

- Identify the behaviors that comprise paraphilia
- Determine the predominant clinical examples of paraphilia-related disorders
- Explore the significant relationship between attention-deficit/hyperactivity disorder (ADHD) in males and paraphilias
- Consider the effect that ADHD combined with dysthymic disorder may have on males during the formative developmental years

Accreditation Statement

Physicians Postgraduate Press is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

Credit Designation

Physicians Postgraduate Press designates this educational activity for a maximum of 1 hour in Category 1 credit toward the American Medical Association Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

Faculty Disclosure

In the spirit of full disclosure and in compliance with all Accreditation Council for Continuing Medical Education Essentials, Standards, and Guidelines, all faculty for this CME activity were asked to complete a full disclosure statement. The information received is as follows:

Neither Dr. Kafka nor Dr. Prentky has significant relationships with entities that may have influenced the presentation in any way.

Discussion of Investigational Information

During the course of their talks and discussions in this *Journal*, faculty may be presenting investigational information about pharmaceutical agents that is outside Food and Drug Administration–approved labeling. This information is intended solely as continuing medical education and is not intended to promote off-label use of any of these medications. Please refer to page 396 for a list of indications of off-label usage describing any medication discussed in this enduring material that, in the authors' clinical estimation, is outside the manufacturer's current recommendations for standard prescribing practices.

Attention-Deficit/Hyperactivity Disorder in Males With Paraphilias and Paraphilia-Related Disorders: A Comorbidity Study

Martin P. Kafka, M.D.; and Robert A. Prentky, Ph.D.

Background: We describe a study of DSM-III-R Axis I diagnoses of lifetime comorbid nonsexual disorders in 60 males with paraphilias (PAs; N = 42) and nonparaphilic forms of sexual impulsivity–designated paraphilia-related disorders (PRD; N = 18).

Method: Subjects completed a semistructured intake questionnaire and sexual inventories, the Inventory to Diagnose Depression, and the Wender Utah Retrospective Scale for the diagnosis of childhood attention-deficit/hyperactivity disorder (ADHD). The lifetime prevalence of Axis I diagnoses of both sexual and nonsexual disorders was ascertained from the aforementioned data and follow-up psychiatric interviews.

Results: Subjects in both PA and PRD groups were diagnosed as having a lifetime prevalence of any mood disorder (71.7%), especially dysthymic disorder (66.7%); any anxiety disorder (43.3%), especially social phobia (28.3%); any psychoactive substance abuse disorders (45.0%), especially alcohol abuse (30.0%); and any impulse disorders NOS (25.0%), especially speeding/reckless driving (16.7%). The only diagnosis that statistically significantly distinguished the PA from the PRD sample ($p = .01$) was retrospectively diagnosed childhood ADHD, identified in 40.0% of the total sample (50.0% PA vs.16.7% PRD). Childhood ADHD was associated with the presence of educational and behavioral problems, lower current mean income, social/legal consequences associated with antisocial impulsivity, cocaine abuse, increased prevalence of comorbid lifetime mood and impulse disorder NOS, and more diagnoses of lifetime Axis I nonsexual and sexual disorders.

Conclusion: Although depressive disorders were the most common Axis I diagnoses across groups, childhood ADHD was the only Axis I disorder statistically significantly associated with paraphilias, socially deviant and aggressive forms of sexual impulsivity.

(J Clin Psychiatry 1998;59:388–396)

Received Aug. 9, 1997; accepted Feb. 5, 1998. From the Harvard Medical School, Boston, Mass. (Dr. Kafka), and the Justice Resource Institute, Massachusetts Treatment Center, Bridgewater, Mass. (Dr. Prentky).

Reprint requests to: Martin P. Kafka, M.D., McLean Hospital, 115 Mill Street, Belmont, MA 02178 (e-mail: mpkafka@aol.com).

There is a paucity of empirical data delineating the Axis I comorbidity disorders that accompany sexual impulsivity disorders, paraphilias, and paraphilia-related disorders. Although behavioral characteristics and developmental variables have been described particularly in sex offenders with paraphilia, the psychological testing instruments commonly used to assess these characteristics do not specifically identify Axis I syndromes as operationally defined by the *Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised* (DSM-III-R)[1] or the *Fourth Edition* (DSM-IV).[2]

In several reports, Kafka and Prentky[3–7] have compared sexually impulsive males who have paraphilias as defined by DSM-III-R with males who have paraphilia-related disorders (repetitive, intensely arousing sexual behaviors that endure at least 6 months and are accompanied by significant distress or social impairment, but, in contrast to persons with paraphilias, are not currently considered socially deviant).[8,9] In these studies, the predominant clinical examples of paraphilia-related disorders include compulsive masturbation, protracted promiscuity, dependence on pornography or phone sex, severe sexual desire incompatibility, and dependence on sexual accessories such as objects (e.g., dildoes) or drugs (e.g., nitrate inhalants).

Kafka and Prentky[6] compared the common DSM-III-R Axis I comorbid mood, anxiety, psychoactive substance abuse, and impulse disorders NOS in 60 consecutively evaluated outpatient males (34 with paraphilias and 26 with paraphilia-related disorders) with sexual impulsivity. Although 15% of that sample reported no lifetime nonsexual Axis I comorbidity, both groups reported a significant lifetime prevalence of any mood disorder (76.6%), especially early-onset dysthymic disorder (53.3%); any

psychoactive substance abuse disorder (63.3%), especially alcohol abuse (40%); any anxiety disorder (46.7%), especially social phobia (31.6%); but a low prevalence of impulse disorders NOS (13.3%). Of particular note, no consistent diagnosis or diagnostic cluster existed that distinguished males with socially deviant paraphilic sexuality from males with the less socially stigmatized paraphilia-related disorders. It was suggested that the prevalence of dysthymic disorder, social phobia, and alcohol abuse validated—through the lens of DSM-III-R criterion–based diagnoses—the psychological testing instruments that characterized paraphilic sex offenders,[10–13] paraphilic nonoffenders,[14–17] and males with paraphilia-related disorders[18–20] as depressed, anxious, socially avoidant or alienated, and abusive of alcohol.

In the only other study that systematically assessed Axis I comorbidity, Black et al.[18] characterized 36 respondents (28 male, 8 female) to an advertisement for "compulsive sexual behavior" and reported lifetime prevalence of nonsexual comorbid Axis I disorders as determined by a computer-assisted version of the Diagnostic Interview Schedule (DIS).[21] In that study, most of the subjects met diagnostic criteria for paraphilia-related disorders. Although 17% of their sample reported no other diagnosis of lifetime Axis I nonsexual disorders, 39% reported mood disorders, especially major depression or dysthymia (39%); any anxiety disorder (50%), especially phobic disorders (42%); any psychoactive substance abuse disorder (64%), especially alcohol abuse (58%); and any impulse disorder NOS (percentage not specified but described as "quite common"), especially compulsive buying (14%).

Inasmuch as the prevalence of mood, anxiety, substance abuse, and impulse disorders NOS comorbidity did not clearly distinguish subjects with paraphilias from those with paraphilia-related disorders in either of the aforementioned publications, an additional study of DSM-III-R Axis I disorders in a different sample of outpatient males with sexual impulsivity disorders is reported here. Although this study utilized a methodology similar to that used in Kafka and Prentky's previous comorbidity study,[6] the data reported here include the additional retrospective evaluation for the prevalence of childhood attention-deficit/hyperactivity disorder (ADHD) as defined in DSM-III-R. To our knowledge, no previous reports have described the prevalence of childhood ADHD in adult subjects with sexual impulsivity disorders, and only a single report has described ADHD in adolescent sex offenders.[22] The assessment of persistent symptoms or "adult ADHD" was not ascertained in this sample.

It was hypothesized that ADHD and its associated sequelae would differentiate male paraphilic sex offenders from male nonoffenders who had either paraphilias or paraphilia-related disorders on the basis of reports that childhood-onset ADHD may antecede adult antisocial and aggressive behaviors,[23–25] characteristics that delineate sex offenders from the latter 2 groups. In addition, some sex offenders report an educational history of repeated grades, learning disabilities, and school-related behavior problems,[26] educational consequences that are commonly associated with a history of ADHD.[23,27]

METHOD

Study Populations

Data were collected prospectively from 60 consecutively evaluated outpatient males (aged 15–59 years) seeking treatment for principal diagnoses of paraphilias or paraphilia-related disorders. Informed consent was obtained from all study participants. Exclusion criteria included the presence of a concurrent neurologic condition, age greater than 60 years, a history of significant head injury with sustained loss of consciousness, current psychoactive substance abuse, and noncompliance with the psychiatric evaluation. The 60 males who completed the diagnostic evaluation were seeking treatment for paraphilias (N = 42), including nonoffender paraphilic (N = 12) and sex offender paraphilic (N = 30) subgroups, and 18 males with paraphilia-related disorders.

Study Materials

All subjects completed a semistructured intake questionnaire that collected demographic, medical, developmental, and psychiatric treatment data.[6] The questionnaire contained an extensive checklist of symptoms designed to detect lifetime prevalence of DSM-III-R Axis I mood, anxiety, psychoactive substance abuse, impulse NOS, and attention deficit disorders (unpublished questionnaire, available from the authors on request). Consistent with DSM-III-R, to meet criteria for ADHD, subjects had to report childhood onset of at least 8 of 14 chronic symptoms of ADHD that were associated with social or educational impairment evident during grade school years.

The Inventory to Diagnose Depression (IDD),[28–30] a self-report scale used to assess current symptoms of major depression, and the Wender Utah Rating Scale (WURS),[31,32] used to assess retrospectively the symptoms of childhood-onset ADHD in adults, were both administered. A cumulative score on the 25-item WURS of 46 or higher correlated with the presence of childhood-onset ADHD. Ward et al.[31]

reported that a WURS score of 46 or higher correctly identified 86% of the subjects with attention deficit disorder, as distinguished from the 99% of the normal controls and the 81% of the depressed subjects who had a WURS score of less than 46. In their group of males with DSM-III-R–defined ADHD, the mean WURS score was 60.3 ± 14.2, the mean unipolar depression group score was 34.2 ± 18.0, and the mean normal group score was 17.9 ± 11.0.

The lifetime prevalence of Axis I diagnoses was assigned by follow-up psychiatric interview(s) by the author (M.P.K.), a Board-Certified psychiatrist, utilizing the intake questionnaire as a database. Lifetime sexual diagnoses were assessed utilizing semistructured sexual inventories (unpublished inventories, available from the authors upon request),[6,7] and confirmed by follow-up psychiatric interview(s). For the determination of Axis I diagnoses, the diagnostic hierarchy and exclusionary rules as described in DSM-III-R were maintained with the following exceptions: (1) primary versus secondary dysthymia were not differentiated; (2) no distinction was made between substance abuse and substance dependence; (3) based on the first author's clinical experience, additional repetitive impulsive behaviors, including speeding/reckless driving and repetitive theft (not distinguished from kleptomania), were scored as impulse disorders NOS. In particular, problems associated with reckless driving have been reported in adults with ADHD.[33,34]

Population Definitions

All paraphilic diagnostic categories were assigned by using DSM-III-R criteria, and paraphilia-related disorders were classified according to the criteria of Kafka and Prentky[4,8,9] (see the introduction). Males included in the group with paraphilia-related disorders (PRD group) reported the presence of at least 1 paraphilia-related disorder but no lifetime paraphilias. Males in the group with paraphilias (PA group) reported repetitive paraphilic behavior and could also have current or past paraphilia-related disorders. The sex offender PA group included all males who had repetitively engaged in paraphilic behavior that included an unwilling or unsuspecting victim. In this sample, these included subjects who had received diagnoses of exhibitionism, pedophilia, voyeurism, frotteurism, telephone scatologia, and rape. Although sexual sadism was diagnosed, none of the males from this subgroup reported nonconsensual victimizing behavior, so this diagnosis was included in the nonoffender PA group. Other diagnoses of nonoffender paraphilic behaviors included fetishism, transvestic fetishism, sexual masochism, and paraphilias NOS. Sex offenders could report nonoffender paraphilias as well but would be included in the former PA subgroup for statistical analysis.

Statistical Analyses

Lifetime prevalence rates of DSM-III-R Axis I disorders are reported as percentages. Designated means are accompanied by standard deviations. The chi-square (χ^2) test of independence was used to compare prevalence rates between the categorical variables. Comparison of continuous variables was ascertained using an unpaired, 2-tailed Student t test and ANOVA for multiple group comparisons. Significant differences of means reported between multiple groups were examined using the post hoc Scheffé test, a conservative statistical test for the pairwise comparison of means. The Pearson correlation coefficient was utilized to compare the linear relationship between continuous variables. The alpha level was set at .05, thus a p value of ≤ .05 was considered statistically significant. Inasmuch as multiple statistical comparisons were performed, it is possible that some reported findings of modest statistical significance are false positives.

RESULTS

The demographic and developmental characteristics of the groups are described in Table 1. Demographic variables such as age, marital status, and ethnicity were similar for all groups. Although a developmental history of physical or sexual abuse was more common to the PA (30.9%) than to the PRD group (5.5%) ($\chi^2 = 4.5$, df = 1, p = .03), there were no differences in abuse histories when the offender PA subjects were compared with the nonoffender PA subjects. In addition, the PRD group spent, on the average, 2 years longer in school than the PA group (t = 2.4, df = 58, p = .01). This difference was primarily attributable to the sex offender PA subjects, who spent, on the average, 2.5 years less in school than the PRD subjects (F = 5.0, df = 2,57; p = .009: Scheffé F ≤ 4.9). Although school-related behavioral problems such as truancy were more prevalent in PA subjects (23.8%) in comparison with PRD subjects (0.0%) ($\chi^2 = 3.5$, df = 1, p = .05), there were no significant differences between the offender versus nonoffender PA subjects. Nearly one third of the PA subjects (30.9% vs. 16.6% of PRD subjects) repeated a grade ($\chi^2 = 1.3$, df = 1, p = NS), most commonly during early grade school, and 30.9% were suspended or expelled from primary or secondary school in comparison with PRD subjects (5.5%) ($\chi^2 = 4.5$, df = 1, p = .03). Differences in educational attainment and school-associated behavioral

Table 1. Demographic and Developmental Characteristics of 60 Males With Sexual Impulsivity Disorders

	Paraphilia Group						Paraphilia-Related Disorder Group	
	Sex Offenders		Nonoffenders		Total			
Variable	N	%	N	%	N	%	N	%
Sample size	30	100.0	12	100.0	42	100.0	18	100.0
Age, mean ± SD	33.1 ± 10.3		37.3 ± 12.2		34.3 ± 10.9		37.3 ± 7.1	
Ethnicity								
White	28	93.3	12	100.0	40	95.2	18	100.0
Black	1	3.3	0	0.0	1	2.4	0	0.0
Other	1	3.3	0	0.0	1	2.4	0	0.0
Marital status								
Married	11	36.7	8	66.7	19	45.2	11	61.1
Single	15	50.0	4	33.3	19	45.2	6	33.3
Divorced	4	13.3	0	0.0	4	9.5	1	5.6
Any history of abuse	10	33.3	3	25.0	13	31.0	1	5.6
Physical	3	10.0	2	16.7	5	11.9	1	5.6
Sexual	6	20.0	1	8.3	7	16.7	0	0.0
Physical and sexual	1	3.3	0	0.0	1	2.4	0	0.0
No abuse history	20	66.7	9	75.0	29	69.0	17	94.4
Educational history								
Years completed, mean ± SD	13.6 ± 2.5		15.5 ± 3.7		14.1 ± 3.0		16.2 ± 3.0	
Truancy	7	23.3	3	25.0	10	23.8	0	0.0
Repeated grade	10	33.3	3	25.0	13	31.0	3	16.7
Suspended/expelled	10	33.3	3	25.0	13	31.0	1	5.6
Income, $1 (× 1000), mean ± SD	36.4 ± 17.7		49.4 ± 30.4		40.9 ± 23.2		67.7 ± 40.3	
Legal status								
Any legal history	22	73.3	4	33.3	26	61.9	3	16.7
Any arrests	21	70.0	3	25.0	24	57.1	3	16.7
Number of arrests	3.3 ± 5.0		1.4 ± 3.2		2.7 ± 4.6		0.27 ± 0.75	
Any incarcerations	7	23.3	0	0.0	7	16.7	2	11.1
Number of incarcerations	0.4 ± 0.81		0 ± 0		0.28 ± 0.70		0.11 ± 0.32	
Psychiatric hospital	11	36.7	1	8.3	12	28.6	1	5.6

problems may have been at least partially responsible for statistically significant differences in mean current gross income between the PA and PRD subjects (t = 2.9, df = 46, p = .005; (t tests excluded students [N = 8] and the unemployed/disabled [N = 4]). There were no income differences between offender versus nonoffender PA subjects.

Involvement with the criminal justice system, including summonses, arrests, and incarcerations for both sexual and nonsexual crimes, was more frequent among the PA subjects in comparison with PRD subjects (χ^2 = 10.3, df = 1, p = .001) and more common to sex offender PA subjects in comparison with nonoffender PA subjects (χ^2 = 5.8, df = 1, p = .01). Statistical differences identified between the PA group and PRD group included the prevalence rate of arrests (57.1% vs. 16.6%) (χ^2 = 8.34, df = 1, p = .003) as well as the mean number of arrests (t = 2.2, df = 58, p = .02) but not the prevalence or number of incarcerations (χ^2 = .30, df = 1, p = NS). The offender PA subjects were statistically significantly more likely to have been arrested in comparison with the nonoffender PA subjects (70.0% vs. 25.0%) (χ^2 = 7.0, df = 1, p = .007). Last, a history of psychiatric hospitalization was more common in the PA subjects (χ^2 = 3.9, df = 1, p = .04).

The frequency distribution of sexual impulsivity disorders is presented in Table 2. The most common sexual impulsivity disorders in both the PA and PRD groups were the following paraphilia-related disorders: compulsive masturbation (44/60; 73.3% of the total sample), pornography dependence (29/60; 48.3%), and protracted promiscuity (22/60; 36.7%). Sex offender PA subjects most commonly reported exhibitionism (50.0%), pedophilia (36.6%), and voyeurism (36.6%), while nonoffender PA subjects were most commonly diagnosed with fetishism (75.0%), masochism (50.0%), and fetishistic transvestism (41.6%). Paraphilic males reported multiple lifetime paraphilic outlets (mean = 1.8 ± 1.2), and both PA and PRD groups self-reported multiple paraphilia-related disorders as well (mean = 1.8 ± 1.3 and 2.4 ± .92, respectively).

Nonsexual DSM-III-R Axis I comorbid diagnoses accompanying sexual impulsivity disorders are described in Table 3. Only 15% (9/60) of the males reported no other Axis I lifetime diagnosis. The mean lifetime Axis I diag-

Table 2. DSM-III-R Sexual Diagnoses in 60 Males With Sexual Impulsivity Disorders

	Paraphilia Group						Paraphilia-Related Disorder Group	
	Sex Offenders		Nonoffenders		Total			
Variable	N	%	N	%	N	%	N	%
Sample size	30	100.0	12	100.0	42	100.0	18	100.0
Paraphilic disorder								
Paraphilic disorders, mean ± SD	2.0 ± 1.3		1.3 ± .65		1.8 ± 1.2		0	0.0
Exhibitionism	15	50.0	0	0.0	15	35.7	0	0.0
Any pedophilia	11	36.7	0	0.0	11	26.2	0	0.0
Heterosexual	4	13.3	0	0.0	4	9.5	0	0.0
Homosexual	3	10.0	0	0.0	3	7.1	0	0.0
Bisexual	1	3.3	0	0.0	1	2.4	0	0.0
Incest, heterosexual	2	6.7	0	0.0	2	4.8	0	0.0
Incest, homosexual	1	3.3	0	0.0	1	2.4	0	0.0
Voyeurism	11	36.7	0	0.0	11	26.1	0	0.0
Fetishism	1	3.3	9	75.0	10	23.8	0	0.0
Masochism	3	10.0	6	50.0	9	21.4	0	0.0
Frotteurism	6	20.0	0	0.0	6	14.3	0	0.0
Telephone scatologia	6	20.0	0	0.0	6	14.3	0	0.0
Transvestism	1	3.3	5	41.7	6	14.3	0	0.0
Sadism	2	6.7	2	16.7	4	9.5	0	0.0
Paraphilia NOS	3	10.0	0	0.0	3	7.1	0	0.0
Rape	2	6.7	0	0.0	2	4.7	0	0.0
Paraphilia-related disorders	1.7 ± 1.2		2.0 ± 1.3		1.8 ± 1.3		2.4 ± 9.2	
Masturbation	22	73.3	9	75.0	31	73.8	13	72.2
Pornography	13	43.3	5	41.7	18	42.9	11	61.1
Any promiscuity	5	16.7	4	33.3	9	21.4	13	72.2
Heterosexual	3	10.0	3	25.0	6	14.3	8	44.4
Homosexual	1	3.3	0	0.0	1	2.4	2	11.1
Bisexual	1	3.3	1	8.3	2	4.8	3	16.7
Phone sex	5	16.7	3	25.0	8	19.0	6	33.3
Severe incompatibility	4	13.3	2	16.7	6	14.3	0	0.0
Accessories	3	10.0	2	16.7	5	11.9	1	5.6
Total sexual impulsivity disorders, mean ± SD	3.6 ± 2.2		3.4 ± 1.7		3.5 ± 2.0		2.4 ± .92	

noses reported by the groups were as follows: PA offenders, 4.1 ± 3.1; PA nonoffenders, 3 ± 3.0; total PA group, 3.8 ± 3.1; PRD subjects, 2.5 ± 1.9; ($F = 2.0$, $df = 2,57$; $p = .13$).

The current mean depression score as determined by the IDD was not significantly different between the offender PA subjects, nonoffender PA subjects, and PRD subjects (mean = 19.6 ± 12.2, 15.6 ± 10.3, and 20.1 ± 12.0, respectively) and corresponded to borderline-to-mild nonmajor depression.[28] On the basis of this finding, we concluded that the presence of current depressive symptoms did not differentially bias the anamnestic recollection of symptoms associated with other Axis I disorders in our sample. Moreover, the subjects (N = 8) who were taking antidepressants at baseline did not have a statistically significantly different baseline IDD score from other subjects who were taking no medication.

For the entire sample, the most frequent DSM-III-R Axis I diagnoses were mood disorders (43/60; 71.7% of the total sample), especially the dysthymic disorders (40/60; 66.7%) and major depression (28/60; 46.7%). Fifty percent of the total sample reported dysthymic disorder, early onset subtype. There were no significant differences between PA and PRD groups in the lifetime prevalence of mood disorders.

Nearly 37% (22/60) of the total sample reported at least 1 lifetime anxiety disorder, social phobia being the most common (17/60; 28.3%). Obsessive-compulsive disorder was diagnosed in 11.6% (7/60) of the entire sample. There were no statistically significant differences between PA and PRD groups in the reported frequency of any anxiety disorder.

Psychoactive substance abuse disorders were reported by 45.0% (27/60) of the total sample, with alcohol abuse being the most frequent psychoactive substance abused (18/60; 30.0%), followed by marijuana (13/60; 21.7%). Cocaine abuse was statistically significantly more common in the PA group compared with the PRD group ($\chi^2 = 5.1$, $df = 1$, $p = .02$) but not between the offender and nonoffender PA groups.

Impulse disorders NOS were reported by 25.0% (15/60) of the total sample, and reckless driving/speeding was the

Table 3. Lifetime DSM-III-R Axis I Disorders in 60 Males With Sexual Impulsivity Disorders*

	Paraphilia Group						Paraphilia-Related Disorder Group	
	Sex Offenders		Nonoffenders		Total			
Variable	N	%	N	%	N	%	N	%
Sample size	30	100.0	12	100.0	42	100.0	18	100.0
No Axis I disorder	4	13.3	3	25.0	7	16.7	2	11.1
Any mood disorder	23	76.7	8	66.7	31	73.8	12	66.7
Major depression	16	53.3	4	33.3	20	47.6	8	44.4
Dysthymic disorder	21	70.0	8	66.7	29	69.0	11	61.1
Early onset	17	56.7	6	50.0	23	54.8	7	38.9
Late onset	4	13.3	2	16.7	6	14.3	4	22.2
Bipolar disorder	2	6.7	0	0.0	2	4.8	0	0.0
Any anxiety disorder	13	43.3	5	41.7	18	42.9	8	44.4
Panic disorder	4	13.3	1	8.3	5	11.9	1	5.6
Social phobia	9	30.0	4	33.3	13	31.0	4	22.2
Generalized anxiety disorder	1	3.3	2	16.7	3	7.1	3	16.7
Obsessive-compulsive	5	16.7	0	0.0	5	11.9	2	11.1
Any psychoactive substance	16	53.3	4	33.3	20	47.6	7	38.9
Alcohol	12	40.0	3	25.0	15	35.7	3	16.7
Marijuana	7	23.3	2	16.7	9	21.4	4	22.2
Cocaine	8	26.7	2	16.7	10	21.7	0	0.0
Prescribed	4	13.3	0	0.0	4	9.5	2	11.1
Hallucinogens	1	3.3	0	0.0	1	2.4	0	0.0
Opiates	1	3.3	0	0.0	1	2.4	0	0.0
Any impulsivity NOS	9	30.0	3	25.0	12	28.6	3	16.7
Theft/kleptomania	5	16.7	2	16.7	7	16.7	0	0.0
Pyromania	2	6.7	0	0.0	2	4.8	0	0.0
Reckless driving	5	16.7	2	16.7	7	16.7	3	16.7
Gambling	0	0.0	1	8.3	1	2.4	0	0.0
Intermittent explosive disorder	0	0.0	0	0.0	0	0.0	1	5.6
ADHD	16	53.3	5	41.7	21	50.0	3	16.7
Psychosis	2	6.7	0	0.0	2	4.8	0	0.0
Posttraumatic stress disorder	5	16.7	1	8.3	6	14.3	0	0.0

*Abbreviation: ADHD = attention-deficit/hyperactivity disorder.

most prevalent impulse disorder (16.7%). Of the combined PA sample, 15.2% reported theft/kleptomania compared with none of the PRD subjects. Overall, however, there were no significant differences between the PA and PRD groups in the frequency of any impulse disorder NOS.

DSM-III-R ADHD was retrospectively diagnosed in 40% of this sample of subjects with sexual impulsivity disorders and was significantly more prevalent in PA subjects (21/42; 50.0%) compared with PRD subjects (16.7%) ($\chi^2 = 5.8$, df = 1, p = .01). Although there was not a significant difference in the frequency of ADHD between offender and nonoffender PA groups, the sex offender PA group reported the higher prevalence of ADHD (53.3% vs. 41.7%). Males diagnosed with ADHD reported a mean WURS score of 56.6 ± 17.6, while those without ADHD scored 29.8 ± 17.2 (t = 5.8, df = 58, p = .0001). Although the prevalence of ADHD did not differentiate between the sex offender PA subjects and the nonoffender PA subjects ($\chi^2 = .46$, df = 1, p = NS), when the sample was divided into sex offender PA, nonoffender PA, and PRD groups, the mean number of retrospectively self-identified childhood symptoms of ADHD in the 3 groups were 6.2 ± 4.6, 4.1 ± 5.0, and 2.5 ± 2.7, respectively (F = 4.4, df = 2,57; p = .01). Post hoc comparisons indicated that the sex offender PA subjects differed significantly from the PRD subjects (Scheffé F = 4.3, $p \leq .05$) in mean number of childhood ADHD symptoms. The mean WURS scores for the 3 groups were 47.8 ± 19.4, 36.5 ± 23.1, and 31.2 ± 21.0, respectively, and these group differences reached statistical significance (F = 3.8, df = 2,57; p = .02). Post hoc analysis revealed that the offender PA subjects had significantly higher WURS scores than the PRD subjects (Scheffé F = 3.6; $p \leq .05$). The correlation coefficient between the total number of ADHD symptoms endorsed in the intake inventory (range, 0–14) and the WURS score (range, 8–83) for the entire sample was robust (r = 0.76; p = .001).

Although a DSM-III-R ADHD diagnosis was not associated with a history of physical/sexual abuse or repeated grades in school, ADHD was significantly associated with the presence of fewer years of education completed (t = 2.8, df = 58, p = .006), more truancy ($\chi^2 = 12.5$,

df = 1, p = .0004) and being suspended or expelled from school (χ^2 = 11.3, df = 1, p = .0008). Childhood ADHD was also significantly associated with problems with the law (χ^2 = 11.3, df = 1, p = .0007), including the mean number of arrests (t = 3.7, df = 58, p = .0005) and incarcerations (t = 2.3, df = 59, p = .02), for both sexual and nonsexual offenses. In addition, ADHD was significantly associated with more lifetime Axis I disorders diagnosed (mean = 5.3 ± 2.7 vs. 2.1 ± 2.1; t = 5.1, df = 58, p = .0001), lifetime comorbid major depression (χ^2 = 4.0, df = 1, p = .04) and dysthymic disorder (χ^2 = 7.8, df = 1, p = .005), a lifetime comorbid impulse disorder NOS (χ^2 = 5.9, df = 1, p = .01), and a history of psychiatric hospitalization (χ^2 = 9.4, df = 1, p = .002). It is noteworthy that 19 (79.2%) of 24 males with ADHD were diagnosed with dysthymic disorder and that only 5 subjects with ADHD (20.8%) reported no lifetime mood disorder. Last, ADHD was significantly associated with cocaine abuse (χ^2 = 8, df = 1, p = .004) but not with alcohol abuse. ADHD was not significantly associated with the diagnosis of any anxiety disorder.

The diagnosis of ADHD was also associated with an increased number of lifetime PA subjects diagnosed (mean ± SD = 2.2 ± 1.5 vs. 1.4 ± .59; t = 2.2, df = 40, p = .02) and the mean total number of lifetime sexual impulsivity disorders (4.0 ± 2.3 vs. 2.7 ± 1.2; t = 2.7, df = 58, p = .007). ADHD was not, however, associated with the total number of lifetime paraphilia-related disorders diagnosed.

DISCUSSION

In this sample of 60 males with sexual impulsivity disorders, the lifetime prevalence of mood disorders (72% of the total sample), especially the dysthymias (67%); anxiety disorders (43%), especially social phobia (28%); psychoactive substance abuse disorders (45%), especially alcohol abuse (30%); and impulsivity NOS disorders (25%), especially speeding/reckless driving (17%) (an impulse disorder not included in DSM-III-R,) did not distinguish males with paraphilias from a nonparaphilic group of sexually impulsive males with paraphilia-related disorders. The lifetime prevalence of mood, anxiety, psychoactive substance abuse, and impulse disorder NOS reported here is similar to the distribution of comorbid diagnoses previously reported by Kafka and Prentky,[6] who utilized similar methodology, but differs somewhat from that found by Black et al.,[18] who reported a comparably higher lifetime prevalence of anxiety disorders and fewer mood disorder diagnoses in a group of "sexually compulsive" males and females with paraphilia-related disorders and paraphilias. In this study, with the exception of ADHD, the only other Axis I diagnosis that significantly distinguished paraphilias from paraphilia-related disorders was cocaine abuse. This difference, however, may be related to the statistical association between cocaine abuse and ADHD in this sample (p = .004) and the higher frequency of ADHD in the PA group.

Childhood ADHD, retrospectively diagnosed both by self-report of childhood symptoms and a validated retrospective rating scale, distinguished the paraphilic group (ADHD diagnosed in 21/42; 50%) from the "nonparaphilic" group with paraphilia-related disorders (3/18; 17%). In addition, the clinical sequelae associated with childhood ADHD generally included the same demographic and developmental characteristics that distinguished the PA from the PRD group. For example, childhood ADHD was associated with primary school–associated behavior problems, fewer years of formal education completed, more problems with the law including arrests and incarceration, lower current earned income, more lifetime comorbid DSM-III-R Axis I sexual and nonsexual diagnoses, and a higher likelihood of psychiatric hospitalization. Contrary to our a priori hypothesis, however, the diagnosis of childhood ADHD did not distinguish paraphilic sex offenders from nonoffender PA subjects.

The developmental sequelae associated with ADHD in this report are consistent with those found in other empirical observations describing adult males with childhood-onset ADHD, including more problems associated with both childhood impulsivity and adult antisocial behavior, including arrests and incarceration; less formal education; and lower socioeconomic status based on current earnings.[23,35] Although we did not assess the persistence of ADHD into adulthood in this sample of sexually impulsive males, it has been estimated that between 10% and 60% of childhood-onset cases of ADHD will persist into adulthood[23,27,36–38] and "residual" ADHD in adulthood is also associated with a higher prevalence of comorbid psychoactive substance abuse and mood, anxiety, and antisocial disorders.[35,39–45]

Inasmuch as the mood disorders, especially the dysthymias, were the most prevalent Axis I diagnoses in both PA and PRD subjects, and attention-deficit/hyperactivity disorder was particular to the PA group, a presumptive relationship between mood disorders, ADHD, and paraphilic sexuality may exist, meriting examination. For example, both ADHD and mood disorders may have childhood onset and be associated with disinhibited ag-

gression[46] and possibly with increased sexual appetitive behavior.[6,7,47–49] Dysthymic disorder, early-onset subtype, reported by 50% of the combined sample, and ADHD during formative developmental years could then have a particularly malignant pathoplastic effect on developing male sexuality, conducing to dysregulated sexual appetite, thrill-seeking behavior, social deviancy, and impaired impulse control. In the only study of genetic factors associated with deviant sexual behaviors in Tourette's syndrome,[48] those probands with both Tourette's syndrome and ADHD had the most disinhibited forms of sexual expression. Analogously, it is possible that ADHD synergistically conduces to the more socially deviant forms of sexual expression (i.e., paraphilias) in those males with dysthymia and other mood disorders.

The conclusions of this report must be evaluated in the context of its design limitations. First, although the sample was large enough to permit statistical comparisons between 2 groups, PA (N = 42) and PRD (N = 18) subjects, the use of multiple statistical comparisons and the further division of the PA group into offender (N = 30) and nonoffender (N = 12) subgroups may limit the power of statistically significant differences identified. Second, although data from the inventories utilized in this study have been previously published, the validity and reliability of those instruments to assess diagnosis have not been rigorously tested. The demographic, developmental, and diagnostic data from this study were derived from the self-report of the study participants corroborated by subsequent diagnostic interviews by a Board-Certified psychiatrist (M.P.K.). Third, although the diagnosis of childhood-onset ADHD was retrospectively obtained with a study questionnaire that demonstrated a robust correlation (r = 0.76) with the score obtained from the WURS, a validated rating scale to retrospectively assess ADHD, the persistence of ADHD into adulthood was not determined. The validity of retrospective diagnosis of ADHD in this sample may have been compromised inasmuch as no significant others were included in rating childhood symptoms, a technique frequently utilized in studies of adults, adolescents, and children with ADHD.[50] Fourth, inasmuch as some of the diagnostic criteria for childhood ADHD and dysthymic disorder overlap (e.g., impaired concentration) and the chronic depressed mood reported by ADHD subjects could have been a sequelae of primary ADHD, the prevalence and specific subtype of mood disorder associated with ADHD requires further elucidation. Last, this study did not evaluate for the presence or exclusion of Axis II disorders (e.g., antisocial, borderline) or other Axis I diagnoses (e.g., conduct or oppositional defiant disorder) and specific learning disabilities that may have contributed to a misdiagnosis of ADHD.

In response to some of the limitations of this study, a follow-up study of sexually impulsive males utilizing DSM-IV criteria for assessment of ADHD and conduct disorder and incorporating a rating scale for the assessment of current persistent symptoms associated with ADHD in adults is in progress.

REFERENCES

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised. Washington, DC: American Psychiatric Association; 1987
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington, DC: American Psychiatric Association; 1994
3. Kafka MP, Prentky R. A comparative study of nonparaphilic sexual addictions and paraphilias in men. J Clin Psychiatry 1992;53:345–350
4. Kafka MP, Prentky R. Fluoxetine treatment of nonparaphilic sexual addictions and paraphilias in men. J Clin Psychiatry 1992;53:351–358
5. Kafka MP. Sertraline pharmacotherapy for paraphilias and paraphilia-related disorders: an open trial. Ann Clin Psychiatry 1994;6:189–195
6. Kafka MP, Prentky RA. Preliminary observations of DSM-III-R Axis I comorbidity in men with paraphilias and paraphilia-related disorders. J Clin Psychiatry 1994;55:481–487
7. Kafka MP. Hypersexual desire in males: an operational definition and clinical implications for men with paraphilias and paraphilia-related disorders. Arch Sex Behav 1997;26:505–526
8. Kafka MP. Update on paraphilia and paraphilia-related disorders. Curr Affect Disord 1993;12:5–13
9. Kafka MP. Paraphilia-related disorders: common, neglected, and misunderstood. Harv Rev Psychiatry 1994;2:39–40
10. Levin SM, Stava L. Personality characteristics of sex offenders: a review. Arch Sex Behav 1987;16:57–79
11. Baxter DJ, Marshall WL, Barbaree HE. Deviant sexual behavior: differentiating sex offenders by criminal and personal history, psychometric measures and sexual response. Criminal Justice Behav 1984;11:477–501
12. Becker JV, Kaplan MS, Tenke CE, et al. The incidence of depressive symptomatology in juvenile sex offenders with a history of abuse. Child Abuse Negl 1991;15:531–536
13. Marshall WL. Intimacy, loneliness, and sexual offenders. Behav Res Ther 1989;27:491–503
14. Wise TN. Fetishism and transvestism. In: Karasu TB, ed. Treatment of Psychiatric Disorders: A Task Force Report of the American Psychiatric Association. Washington, DC: American Psychiatric Association; 1989: 633–646
15. Wise TN, Fagan PJ, Schmidt CW. Personality and sexual functioning of transvestic fetishists and other paraphiliacs. J Nerv Ment Dis 1991;179: 694–698
16. Fagan PJ, Wise TN, Schmidt CW. A comparison of five-factor personality dimensions in males with sexual dysfunction and males with paraphilia. J Pers Assess 1991;57:434–448
17. Wilson GD, Gosselin C. Personality characteristics of fetishists, transvestites and sadomasochists. Pers Indiv Diff 1980;1:289–295
18. Black DW, Kehrberg LLD, Flumerfelt DL, et al. Characteristics of 36 subjects reporting compulsive sexual behavior. Am J Psychiatry 1997;154: 243–249
19. Carnes P. Out of the Shadows: Understanding Sexual Addiction. Minneapolis, Minn: CompCare; 1983
20. Carnes P. Don't Call It Love: Recovery From Sexual Addiction. New York, NY: Bantam Books; 1991

21. Robins LN, Helzer JE, Cottler L, et al. NIMH Diagnostic Interview Schedule, Version III-R (DIS III-R). St. Louis, Mo: Washington University School of Medicine; 1989
22. Kavoussi RJ, Kaplan M, Becker JV. Psychiatric diagnoses in adolescent sex offenders. J Am Acad Child Adolesc Psychiatry 1988;27:241–243
23. Mannuza S, Klein RG, Bessler A, et al. Adult outcome of hyperactive boys: educational achievement, occupational rank, and psychiatric status. Arch Gen Psychiatry 1993;50:565–576
24. Satterfield JH, Hoppe CM, Schell AM. A prospective study of delinquency in 110 adolescent boys with attention deficit disorder and 88 normal adolescent boys. Am J Psychiatry 1982;139:795–798
25. Eyestone LL, Howell RJ. An epidemiological study of attention-deficit hyperactivity disorder and major depression in a male prison population. Bull Am Acad Psychiatry Law 1994;22:181–193
26. Langevin R, Pope S. Working with learning disabled sex offenders. Ann Sex Res 1993;6:149–160
27. Weiss G, Hechtman L, Milroy T, et al. Psychiatric status of hyperactives as adults: a controlled prospective 15 year follow-up of 63 hyperactive children. J Am Acad Child Adolesc Psychiatry 1985;24:211–220
28. Zimmerman M, Coryell W, Corenthal C, et al. A self-report scale to diagnose major depressive disorder. Arch Gen Psychiatry 1986;43:1076–1081
29. Zimmerman M, Coryell W. The Inventory to Diagnose Depression (IDD): a self-report scale to diagnose major depressive disorder. J Consult Clin Psychol 1987;55:55–59
30. Zimmerman M, Coryell W. The validity of a self-report questionnaire for diagnosing major depressive disorder. Arch Gen Psychiatry 1988;45: 738–740
31. Ward MF, Wender PH, Reimherr FW. The Wender Utah Rating Scale: an aid in the retrospective diagnosis of childhood attention deficit hyperactivity disorder. Am J Psychiatry 1993;150:885–890
32. Stein MA, Sandoval R, Szumowski E, et al. Psychometric characteristics of the Wender Utah Rating Scale (WURS): reliability and factor structure for men and women. Psychopharmacol Bull 1995;31:425–433
33. Barkley RA, Guevremont DC, Anastoploulos AD, et al. Driving-related risks and outcomes of attention deficit hyperactivity disorder in adolescents and young adults. Pediatrics 1993;92:212–218
34. Murphy K, Barkley RA. Attention deficit hyperactivity disorder in adults: comorbidities and adaptive impairments. Compr Psychiatry 1996; 37:393–401
35. Biederman J, Faraone SV, Spenser T, et al. Patterns of psychiatric comorbidity, cognition, and psychosocial functioning in adults with attention deficit-hyperactivity disorder. Am J Psychiatry 1993;150:1792–1798
36. Mannuzza S, Klein RG, Bonagura N, et al. Hyperactive boys almost grown up, V: replication of psychiatric status. Arch Gen Psychiatry 1991; 48:77–83
37. Gittelman R, Mannuzza S, Shenker R, et al. Hyperactive boys almost grown up, I: psychiatric status. Arch Gen Psychiatry 1985;42:937–947
38. Hechtman L. Long-term outcome of attention-deficit hyperactivity disorder. Psychiatr Clin North Am 1992;1:553–565
39. Borland BL, Heckman HK. Hyperactive boys and their brothers: a 25 year followup study. Arch Gen Psychiatry 1976;33:669–675
40. Morrison JR. Childhood hyperactivity in an adult psychiatric population: social factors. J Clin Psychiatry 1980;41:40–43
41. Shekim WO, Asarnow RF, Hess E, et al. A clinical and demographic profile of a sample of adults with adult attention deficit hyperactivity disorder, residual state. Compr Psychiatry 1990;31:416–425
42. Biederman J, Wilens T, Mick E, et al. Psychoactive substance use disorders in adults with attention deficit hyperactivity disorder (ADHD): effects of ADHD and psychiatric comorbidity. Am J Psychiatry 1995;152: 1652–1658
43. Wender PH, Reimherr FW, Wood D, et al. A controlled study of methylphenidate in the treatment of attention deficit disorder, residual subtype, in adults. Am J Psychiatry 1985;142:547–552
44. Wender PH, Reimherr FW, Wood DR. Attention deficit disorder ("minimal brain dysfunction") in adults: a replication study of diagnosis and drug treatment. Arch Gen Psychiatry 1981;38:449–456
45. Ratey JJ, Greenberg MS, Bemporad JR, et al. Unrecognized attention-deficit hyperactivity disorder in adults presenting for outpatient psychotherapy. J Child Adolesc Psychopharmacol 1992;2:267–275
46. van Praag HM. Affective disorders and aggression: evidence for a common biological mechanism. Suicide Life Threat Behav 1986;16:103–132
47. Hallowell EM, Ratey JJ. Driven To Distraction. New York, NY: Touchstone; 1995
48. Comings D. Role of genetic factors in human sexual behavior based on studies of Tourette syndrome and ADHD probands and their relatives. Am J Med Genet 1994;54:227–241
49. Nofzinger EA, Thase ME, Reynolds CF, et al. Sexual function in depressed men: assessment by self-report, behavioral and nocturnal penile tumescence measures before and after treatment with cognitive therapy. Arch Gen Psychiatry 1993;50:24–30
50. Wender P. Attention-Deficit Hyperactivity Disorder in Adults. New York, NY: Oxford University Press; 1995

DISCLOSURE OF OFF-LABEL USAGE

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

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 388 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, address, phone number, and fax number 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 quiz 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 quiz, 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. In this study, the sex offender paraphilia group included all males who had repetitively engaged in paraphilic behavior that included an unwilling or unsuspecting victim.
a. True
b. False

2. In this study, which of the following groups of behaviors is not an indicator for the sex offender paraphilia (PA) group?
a. Exhibitionism and voyeurism
b. Pedophilia and rape
c. Fetishism, transvestic fetishism, and sexual masochism
d. Pornography dependence and phone sex
e. Frotteurism and telephone scatologia

3. For this study, which of the following is *not* one of the predominant clinical examples of paraphilia-related disorders?
a. Paraphilias NOS
b. Protracted promiscuity
c. Dependence on sexual accessories
d. Dependence on pornography or phone sex
e. Severe sexual desire incompatibility

4. DSM-III-R attention-deficit/hyperactivity disorder (ADHD) was significantly more prevalent in the PA subjects compared with the paraphilia-related disorder (PRD) subjects.
a. True
b. False

5. In this study, ADHD was significantly associated with subjects having which of the following characteristics?
a. Suspensions and expulsions from school
b. More years of education completed
c. Arrests and incarcerations
d. Less truancy
e. Answers a and c only

6. In this study, with the exception of ADHD, the only other Axis I diagnosis that significantly distinguished paraphilias from paraphilia-related disorders was:
a. Alcohol abuse
b. Child abuse
c. Cocaine abuse
d. Anxiety disorders
e. All of the above

7. Based on the results of this study, inasmuch as mood disorders, especially the dysthymias, were the most prevalent Axis I diagnoses in both the PA and PRD subjects and attention-deficit/hyperactivity disorder was particular to the PA group, a presumptive relationship between mood disorders, ADHD, and paraphilic sexuality may exist.
a. True
b. False

8. Dysthymic disorder, early-onset subtype, and ADHD during the formative developmental years could have a particularly malignant pathoplastic effect on developing male sexuality, conducing to:
a. Dysregulated sexual appetite
b. Social deviancy
c. Impaired impulse control
d. Thrill-seeking behavior
e. All of the above

Answers to the January 1998 CME posttest

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

Circle the one correct answer for each question.

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

Print or type

Name _____

Social Security Number _____ – ___ – _____
(for CME credit recording purposes)

Degree _____

Affiliation _____

Address _____

City, State, Zip _____

Phone ( ) _____

Fax ( ) _____

E-mail _____

Hospital: ❑ Private Practice: ❑ Resident: ❑ Intern: ❑

Deadline for mailing

For credit to be received, the envelope must be postmarked no later than January 1999 (outside the continental United States, March 1999).

Keeping a copy for your files

Retain a copy of your answers and compare them with the correct answers, which will be published after the submission deadline.

Payment

A $10 payment must accompany this form. You may pay by check, money order, or credit card (Visa or MasterCard). Make check or money order payable to Physicians Postgraduate Press. If paying by credit card, please provide the information below.

Check one: ❑ Visa ❑ MasterCard

Card number _____

Expiration date _____

Your signature _____

Please evaluate the effectiveness of this CME activity on a scale of 1 to 5 (1 being poor, 5 being excellent).

1. Overall quality of this CME activity ____
2. Content ____
3. Format ____
4. Faculty ____
5. Achievement of educational objectives:
   - A. Enabled me to identify the behaviors that comprise paraphilia (PA). Yes ❑ No ❑
   - B. Enabled me to determine the predominant clinical examples of paraphilia-related disorders (PRD). Yes ❑ No ❑
   - C. Enabled me to explore the significant relationship between attention-deficit/hyperactivity disorder (ADHD) in males and paraphilias. Yes ❑ No ❑
   - D. Enabled me to consider the effect that ADHD combined with dysthymic disorder may have on males during the formative developmental years. Yes ❑ No ❑
6. This CME activity provided a balanced, scientifically rigorous presentation of therapeutic options related to the topic, without commercial bias. Yes ❑ No ❑
7. Please comment on the impact that this CME activity might have on your management of patients.

   _____

   _____

   _____

   _____

8. Please offer additional comments and/or suggested topics for future CME activities.

   _____

   _____

   _____

   _____

TEAR OUT AND MAIL THIS PAGE, ALONG WITH YOUR PAYMENT, TO:
PHYSICIANS POSTGRADUATE PRESS • OFFICE OF CONTINUING MEDICAL EDUCATION • P.O. BOX 752870 • MEMPHIS, TN 38175-2870

IF YOU ARE PAYING BY CREDIT CARD, YOU MAY FAX THIS PAGE TO:
OFFICE OF CONTINUING MEDICAL EDUCATION AT 901-751-3444