Jeffrey L. Geller,[1] *M.D., M.P.H.; Melissa McDermeit,*[1] *M.S.W.; and Julie-Marie Brown,*[1] *B.S.*

Pyromania? What Does It Mean?

REFERENCE: Geller JL, McDermeit M, Brown J-M. Pyromania? What does it mean? J Forensic Sci 1997;42(6):1052–1057.

ABSTRACT: Pyromania, despite an explicit definition spelled out in successive editions of the American Psychiatric Association's Diagnostic and Statistical Manual since 1980, remains an elusive concept. While rarely diagnosed by psychiatrists, pyromania is a label frequently applied by law enforcement and fire fighting/investigation personnel. To test the understanding of pyromania by these professions, the F.B.I. collected data from participants at advanced fire investigation training sessions, specifically asking them to write out their understanding of pyromania. This paper reports on the data obtained from 603 respondents. The results indicate a remarkably poor understanding of pyromania. The authors examined sources of information available to law enforcement and fire fighting/investigation professionals and found the sources to be generally as misinformed as they are. The authors conclude that the professions of psychiatry, law enforcement and fire fighting/investigation must have better source material available to them and must share information better if we are to decrease the threats posed by the ineffectual differentiation of the causes of serial arson.

KEYWORDS: forensic science, pyromania, forensic psychiatry, definition, law enforcement, firefighters, investigators

In the wake of an unexplained spate of arson fires in churches with predominantly African-American congregations in 1996, the following news item appeared.

> A fire that burned predominantly black Longridge CME Church in Marshall, Texas was set by a black church member. . .who also is a volunteer firefighter, authorities said. . . He was helping extinguish the fire May 14, but authorities say he later admitted to using a flammable liquid to start the blaze (1).

Does this firesetter, or ones like him, suffer from pyromania? It may, to a significant degree, depend upon which profession is applying the label.

Background

Attempts to understand pathological firesetting began around the turn of the nineteenth century, first in Germany and France, and then in England and America. Early German writers considered pathological firesetting to be committed by pubescent, mentally retarded girls with abnormal psychosexual development and menstrual difficulties. In France, Marc, in 1833, classified pathological firesetters as suffering from "monomanie incendiare" or "pyromania." Prichard was the first to discuss in English, the concept that firesetting might be the sole symptom of a mental disorder. Prichard incorporated the language of his European counterparts, i.e., pyromania, into his writing on firesetting, and classified pyromania as an "instinctive madness" (2).

Isaac Ray was the first American to specifically address the question of pathological firesetting, mentioning it in the first edition of his *Treatise on the Medical Jurisprudence of Insanity* in 1838. He first used the term "pyromania" in the second edition of his book in 1844. Readers of the English language professional literature were further informed about pyromania in 1845 by the English translation of Esquirol's treatise on insanity (2).

During the 1850s a difference of opinion appeared in American medical publications between those authors who supported the ideas of Ray and Esquirol, and those who rejected the theory that pyromania was a specific mental disorder. During the 1860s the debate continued, fueled by translations of works by German psychiatrists. Debate over the diagnosis of pyromania continued in American medical publications until the early 1880s, when the death of President Garfield in 1881 and the trial of his assassin caused strong reactions against psychiatric diagnoses that mitigated responsibility. Throughout the remainder of the 19th century, pyromania was largely rejected as a psychiatric disorder (2).

During the first half of the 20th century, pyromania re-emerged as a specific diagnosis. Kraepelin's translated textbook on clinical psychiatry defined pyromania in 1902 as an impulsive insanity caused by an irresistible impulse to set fires. In 1924, Stekel defined pyromania as a developmental disorder caused by impeded or unfulfilled sexual development. Freud indicated his interest in firesetting in 1930 and in an influential 1932 essay, Freud described his concept of the relationships between urethral eroticism and fire (2).

In 1951, Lewis and Yarnell published the most comprehensive study ever of pathological firesetting in which they provide a caveat about the "irresistible impulse" explanation of firesetting: "The term is a favorite with reporters, detectives, and psychiatrists, and the offenders quickly adopt it for themselves as an easy, non-incriminating explanation for their behavior" (3).

Pyromania has been inconsistently dealt with in the American Psychiatric Association's Diagnostic and Statistical Manuals (DSM). DSM-I, in 1952, classified pyromania as an obsessive-compulsive reaction. DSM-II, in 1968, failed to mention the term. Pyromania returned as a distinct impulse disorder and as a part of the standard psychiatric taxonomy in DSM-III (1980), DSM-III-R (1987), and DSM-IV (1994). In each of the last three DSMs, pyromania has been classified as a "disorder of impulse not elsewhere classified," with attempts at fine-tuning the diagnostic criteria in each edition (4).

While pyromania has had an explicit definition with clear criteria directing when the label should be applied since the publication of DSM-III, is the label currently being used consistently and appropriately? As a term often applied by many outside the mental health professions, do different professions apply it with the same

[1]Professor of Psychiatry and Director of Public Sector Psychiatry, research asssociate, and research coordinator, respectively, University of Massachusetts Medical Center, Department of Psychiatry, Worcester, MA.

Received 12 Aug. 1996; and in revised form 9 Jan. 1997, 26 March 1997; accepted 26 March 1997.

understanding? When arson investigators, police, firefighters and psychiatrists, for example, speak of "pyromaniacs," are they talking a common language? If not, what are the implications for the care and treatment of pathological firesetters on the one hand, and for the protection of society from this subset of arsonists on the other?

Methods

In 1994, the Federal Bureau of Investigation collected data from participants in training sessions on advanced fire investigations held across the country. The training focused on the motivational and methodological characteristics of serial arson, and the traits of serial arsonists. When the trainer reached the section on motives, those in attendance were asked to fill out a card indicating their occupation, age, gender and years of experience in occupation, and to provide an open-ended definition of pyromania. Occupations included: law enforcement, fire service, law and fire (when individuals identified themselves as having experience in both), mental health professionals, and others (forestry service, insurance investigator, forensic scientist).

The data from these survey cards were collected and the definition of pyromania content analyzed in several ways. Content analysis is a tool for finding certain concepts in a body of text. Key terms or ideas are identified and then looked for in each body of text. In our case, the body of text was the definition of pyromania.

As a primary content analysis, several dichotomous variables were created based on commonly mentioned concepts of pyromania: a) knowing that pyromania involves fire; b) knowing that pyromania is a mental illness; c) correctly mentioning (fire) setting; d) correctly mentioning watching fire or related activities; e) correctly mentioning uncontrollable urge or desire; f) correctly mentioning more than one fire; g) correctly mentioning thrill related to fire and fire situations; h) correctly mentioning fire fighters/equipment; i) mentioning 'playing' with fire; j) using stigmatizing language; k) incorrectly mentioning sex/sexual gratification as a motive; l) incorrectly mentioning power as a motive; m) incorrectly mentioning profit as a motive; n) incorrectly mentioning destruction as a motive; o) incorrectly calling pyromania a person.

Second, each definition was assessed on whether it correctly included the five DSM-III-R criteria for pyromania, and whether any motive listed in the fifth criterion (E below) was specifically violated. The five parts of the DSM-III-R criteria are: A) deliberate and purposeful fire-setting on more than one occasion; B) tension or affective arousal before the act; C) fascination with, interest in, curiosity about, or attraction to fire and its situational context or associated characteristics (e.g., paraphernalia, uses, consequences, exposure to fires); D) intense pleasure, gratification or relief when setting fires, or when witnessing or participating in their aftermath; E) the fire-setting activity is not done for monetary gain, as an expression of sociopolitical ideology, to conceal criminal activity, to express anger or vengeance, to improve one's living circumstances, or in response to a delusion or hallucination (4). For this assessment, if a respondent included any portion of the specified DSM-III-R criteria, the respondent was credited with including the criteria.

Finally, the researchers looked at the specific elements of each DSM-III-R criteria. From this, the researchers extracted 11 functional elements and assigned an overall 'grade.' One point was awarded for each element mentioned: a) deliberate and purposeful; b) set fire; c) more than once; d) tension, affective arousal buildup *before* fire (uncontrollable urge); e) fascination, interest, curiosity, attraction to fire; f) fascination, interest, curiosity, attraction to fire-related paraphernalia, situations, consequences; g) pleasure, gratification or relief when setting fire; h) pleasure, gratification or relief when witnessing aftermath; i) pleasure, gratification or relief when participating in aftermath; j) fire not set for other specific reasons unrelated to mental illness, i.e., profit, anger; k) fire not set for reasons related to psychiatric symptoms, i.e., hallucinations or delusions; because of impaired judgment from Mental Retardation, dementia or substance abuse; or because of conduct disorder, manic episode, or antisocial personality disorder. While the DSM-III-R criteria address the perspective of mental health professionals, the functional elements speak to those with law and/or fire backgrounds where the diagnostic language is both less familiar and less relevant.

Grades were assigned by one researcher, reviewed by a second, reviewed again by both the researchers, and any conflicts or questions were resolved by the third researcher. Several definitions were basically correct, but the respondent added something to the definition that invalidated it by making it too inclusive or not inclusive enough. To capture this, we created a single dichotomous 'inclusiveness' variable. A definition that was either under- or over-inclusive scored a 1 on this variable. A score of zero meant the definition was neither over- nor under-inclusive. An example of an over-inclusive definition would be "Enjoys lighting fires," which would include firesetters without pyromania. An example of an under-inclusive definition would be, "Male, over 30, sets more than 20 fires," which excludes females, firesetters under age 30 years old, and individuals who set fewer than 20 fires.

The dichotomous concept variables, DSM-III-R criteria, grade and the inclusiveness variable were first compared across occupation, state, age and gender. States were grouped into four 'zones': West included Arizona, California, Oregon and Washington. Mid-Atlantic included New York, New Jersey, Pennsylvania, and Washington, D.C. Northeast included Massachusetts, New Hampshire, and Rhode Island. South included North Carolina, Texas, and Virginia. Occupation was grouped into Law Enforcement, Fire Services, Law and Fire, Health Care (including mental health workers and doctors) and Other (including private investigators, insurance, and other). Age and years of experience were examined as variables because younger respondents would be more likely to have been exposed only to more recent sources of information about firesetting, mental illness and pyromania.

In order to eliminate an interaction between zone, gender and occupation (most of those in Health Care were females from the South), the Health Care occupation was removed from the analysis and the states were regrouped into sets of more equivalent size. This 'rezone' was as follows: South—Arizona, North Carolina, Texas and Virginia; West—California, Oregon and Washington; North East—Massachusetts, New Hampshire, and Rhode Island; Mid-Atlantic—New York, New Jersey, Pennsylvania, and Washington, D.C. A two-way analysis of variance using occupation and rezone showed more independence. The results discussed here reflect this new variable, except where indicated to show the original interaction. Two respondents who did not indicate a state were dropped from the analysis. Of particular interest was whether characteristic differences within the respondents would produce group differences that would have implications for future training.

Results

Respondents

Originally, there were a total of 603 respondents surveyed by the Federal Bureau of Investigation at training sessions with representatives from 14 states. Respondents were mostly male (92.4%) with a mean age of 41.7 (range = 20–72), and a median of seven

years of experience (range = 0 to 47), mean = 9.2 (skew = 1.27)). The largest groups of respondents were from the West (41.0%), and Mid-Atlantic (36.8%), with 13.0% from the South and 9.2% from New England. The majority of respondents were in fire service (60.4%).

After removing health care workers and rezoning, 548 respondents remained in the sample. Of this group, 41% were from the West, 40% from the Mid-Atlantic, 10% from New England, and 9% were from the South. Males represented an even larger percentage of this population than of the entire group (95.4%). The new group had a mean age of 40.8 (range = 20–72) and a median of seven years of experience (range = 0–47 years). Fire Service remained the largest occupational group (66.1%). Law enforcement represented 20.0%, while Law & Fire and Other represented 4.5% and 9.3% respectively.

Pyromania Definitions

Most, but not all respondents mentioned fire in their definition (95.4%) and most mentioned 'setting' (80.7%). Thus most (81.9%) included the criteria for DSM-III-R part A (defined above). Just under half included the concepts of 'thrill' or 'fascination with fire' (46.2%) and 'uncontrollable urge' (40.5%). One quarter indicated repeated episodes of firesetting (25.0%). Other concepts were mentioned by a minority of the respondents: mental illness (17.0%), watching fire (17.3%), sex/sexual gratification (10.0%), power (6.0%), made a stigmatizing comment (5.1%), destruction as goal (3.8%), fire fighting (3.3%), playing with fire (1.6%), profit as a motive (1.3%).

Almost half of the respondents included parts B and D of the DSM-III-R criteria (45.3% and 45.4%, respectively). Part C was mentioned by only 87 respondents (15.9%), and part E was correctly mentioned only eight times (1.5%). In fact, there were many more respondents who specifically got part E incorrect (9.9%), than got it correct.

The mean grade for all respondents was 2.93, the median was 3.0 (SD = 1.27). The grades ranged from 0 to 6 out of a maximum score of 11. This means the highest grade any respondent achieved was 55%. A total of 176 respondents (32.1%) were under- or over-inclusive in their definitions.

Interactions

Gender

Gender did differ by original zone and occupation, with 51% of the female respondents coming from the South ((50%) in mental health care). Although the interaction effects of occupation and zone were eliminated by removing health care workers and rezoning the states, there remain significantly more females in the South; $X^2(3) = 11.6$, $p = .01$. The findings reflect the smaller group and should be considered in that context. Clearly it would be a better option to gather additional female respondents and a greater distribution of health care workers.

The dichotomous content variable referring to "uncontrollable urge" differed by gender ($X^2 = 5.86$, s = .015), with 64% of the women and about 39% of the men mentioning this concept. No other concept variables differed significantly by gender. DSM-III-R variables also did not differ by gender.

Age

Law Enforcement Officers had the youngest mean age (38.6), followed by Fire Service (41.2), and Law and Fire (42.2). 'Other' occupations had the highest mean age (44.8) ($F(3541) = 5.48$, $p = .001$). Among the new rezone groups, West had the highest mean age (42.9), followed by New England (40.3) and Mid-Atlantic (40.0). The South had the lowest (38.5) ($F(3541) = 5.43$, $p = .0011$).

Regarding the concept variables, age did not differ significantly for any of the concept variables. Although not statistically significant, those who mentioned that the fire setting was not a symptom of another mental illness were younger (41.0) than those who did not (53.0) ($F(1543) = 3.26$, $p = .07$). The only significant DSM-III-R variable was DSM-III-R C, where those who mentioned this criterion were younger (39.0) than those who did not (41.5) ($F(1543) = 5.37$, $p = .02$).

Years of Experience

Since age and years of experience were directly related (Pearsons $r = .58$, $p < .001$), years of experience followed a similar pattern as age, with Law Enforcement having the lowest mean experience (6.8 years), followed by Fire Service (8.9), and Law and Fire (9.7), with 'Other' occupations having the highest ((13.2) $F(3544) = 7.79$, $p = .0001$).

Those who mentioned watching the fire were significantly less experienced (6.49) than those who did not (9.6 years) ($F(1538) = 11.82$, $p = .0006$). Those who mentioned setting fire for profit had fewer years of experience (8.97) than those who did not (15.9), ($F(1538) = 5.17$, $p = .023$).

Zone

Respondents from the South were the most likely to mention fire in the definition of pyromania while New England was least likely: $X^2(3) = 8.24$, $p = .04$. New England respondents mentioned 'control' most frequently and Mid-Atlantic the least; $X^2(3) = 9.97$, $p = .02$. Those from the South were the most likely to mention sex or sexual gratification in their definitions, while New Englanders were the least likely; $X^2(3) = 9.1$, $p = 0.3$. Over half of the respondents from New England mentioned repeated fire setting or multiple fires while only 3.6% of those from the Mid-Atlantic zone did: $X^2(3) = 114.9$, $p = .0000$. There was a significant difference between groups in whether the DSM-III-R E criterion was violated in the pyromania definition: $X^2(3) = 9.88$, $p = .02$. Southern respondents were the most likely to violate DSM-III-R E criterion and New England was the least likely. There was a difference in overall grade between rezone groups that approached significance; $F(3544) = 2.37$, $p = .069$, but no significant difference between rezones on the inclusiveness variable.

Occupation

The occupations differed in overall grade ($F = 2.64$, $p = .049$). This is discussed in more detail below under 'Grade.' Ninety percent of the respondents in Law Enforcement mentioned the DSM-III-R A criterion, while 88.0% of Law and Fire, 80.9% of Fire Service, and only 68.6% of the Other occupations did ($X^2 = 11.76$, $p = .0083$). Differences approached significance for DSM-III-R C ($X^2 = 7.61$, $p = 0.0547$). But in this case, it was Fire Service and Other occupations mentioning the DSM-III-R C criterion most frequently (18.2% and 17.6% respectively), followed by Law and Fire (12%) and Law Enforcement (8.2%). The only concept variable which differed by occupation was mentioning 'setting' fire. Law Enforcement workers mentioned this concept most frequently (89.1%). While in both Fire Service and Law and Fire over 80%

of the respondents mentioned 'setting,' only 64.7% of Other occupations did.

Grade and Inclusiveness

Those who scored a 1 on the inclusiveness variable had a mean grade of 2.53 while those who scored zero had a mean grade of 3.12 ($F(1546) = 26.52$; $p = .0000$). Grade was significantly and negatively correlated with mentioning mental illness in the definition ($r = -.1039$, $p = .015$). Thus, if someone mentioned mental illness in the definition, his/her overall grade was likely to be lower.

Occupation had a significant relation to grade ($F(3547) = 2.94$; $p = .011$). Law Enforcement experience (mean grade 3.18) was related to higher grades ($F(3544) = 2.64$, $p = .049$), with both law occupation ($r = .1003$, $p = .019$) and any law occupation ($R = .1126$, $p = .008$) correlated significantly with grade. This was explored further by creating an ordinal measure of law and fire experience. Table 1 shows this measure and a trend which supports law experience relating to higher grade. 'Other' occupations received the lowest overall grade (2.69). The number of respondents who scored 1 on the inclusiveness variable did not differ significantly by occupation.

Stigma

We created a dichotomous variable to indicate whether or not the definition contained some kind of stigmatizing comment (for example: "bed wetter," "loony," "weirdo," etc.). There were significant differences in grade and inclusiveness between those who were and were not stigmatizing. For those who scored 1 on inclusiveness, 13.6% made stigmatizing comments while only 1% of those who scored zero were stigmatizing ($x^2 = 36.67$, $p = .0000$).

Discussion

Of all the structural fires in the United States in 1994 (over 614,000), those that were deliberately set or were of suspicious origin accounted for 86,000 fires, or 14%. These fires resulted in 550 deaths and $1.447 billion in property loss. This latter figure is 21.1% of all property loss from structural fires in 1994 (5). National data on what percentage of arson fires are due to pyromania are not available (6).

While these aggregate statistics are impressive, the destruction from a single episode of arson can be numbing. In October, 1994 a 26-year-old transient confessed to setting the Laguna Beach, California fire the year before that had resulted in $528 million of damage (7). There can be no doubt that deliberately set fires in the United States are a major societal problem.

In order to effectively confront arson, law enforcement and fire officials must have a well-grounded understanding of the causes of arson. Pathological firesetting, and pyromania as a subset of pathological firesetting, is one cause of arson that these officials must comprehend. Our data indicate that law and fire personnel have a very poor understanding of what pyromania is. Perhaps worse, they are not simply uninformed, but badly misinformed.

TABLE 1—*Occupation and grade on 11 functional elements.*

Occupational Group	Members Mean Grade	Non-Members Mean Grade
Fire only	2.8674	3.0430
Any Fire	2.8863	3.0248
Law and Fire	3.1600	2.9159
Any Law	3.1778	2.8450*
Law only	3.1818	2.8824*

*Significant difference < .05.

The reasons for this may become clear if we examine the sources of information available to those who work in law enforcement and fire investigation. The recent psychiatric literature has made bonefide strides in the classification of pathological firesetting since DSM-III-R (8–12). Articles explain pyromania (13–15); describe conditions that might be confused with it (8,16,17); and highlight through studies of firesetters, that pyromania is rare (18–24). But law enforcement officers, firefighters, and arson investigators generally do not consult the psychiatric literature. What information about pyromania do publications in their fields provide? And what do the courts have to say about pyromania?

In the *American Fire Journal*, in 1989, John Orr, a well known arson investigator (and convicted, incarcerated serial arsonist), reported on the case of "Michael." Orr describes Michael as a young man with a depression who "used fire to get back at people" and who set fires when he "needed attention most." Orr labels Michael "a vanity pyromaniac" (25). In *Security Management*, Frank Krzeszowski, a corporate security manager, describes pyromania as a "personality disorder." Individuals with this disorder, he says, have "inferiority complexes," perceive themselves to have "defects in bodily appearance," experience a "sensual pleasure" when setting a fire, and experience satisfaction during the early stages of a fire such that the pyromaniac walks away while the fire is still small. Krzeszowski does say that pyromania is rare, but then adds "once a pyromaniac moves into an area, he or she may account for up to 90% of the fires in that region" (26). In *Fire Engineering*, in 1996, Ellen Emerson White, a student of fire science at John Jay College of Criminal Justice, includes in her descriptors of pyromania: "low-IQ/mentally defective or genius-level IQ, given to fantasies, sexually aroused by fire, evidence of erotomania, history of delusions and/or psychosis and other emotional disturbances, history of bed-wetting" (27). Since this information is either without basis, or incorrect, is it any wonder that law and fire personnel are confused about pyromania?

The courts, during the last decade, are not consistently doing much better. In *Toole v. State* the court provides a reasonable description of a defendant who might have pyromania: "appellant suffers from pyromania, the overwhelming impulse to set fire. . .he lacks the normal ability to process tension; when he has an overwhelming need to release tension, setting fires is one of the ways in which he does it; and at the time he sets the fire, he is overwhelmingly taken by the impulse" (28). In *State v. Blanco*, however, the Court describes the setting of two fires by a jail inmate as "pyromaniacal acts" (29). In *State v. Stewart*, the Court labels a multiple firesetter with "poor impulse control, anti-social personality, epileptic seizures. . .a lack of insight into personal problems as well as refusal to accept responsibility for wrongful actions, homosexuality, borderline intelligence, and a history of drug and alcohol abuse" as a pyromaniac (30,31). In *People v. Overman*, the Court indicates that the defendant "suffered from a borderline personality disorder characterized by traits of unstable and intense personal relationships, unstable mood, and impulsiveness." The Court then goes on to say, "this manifested itself as pyromania" (32). While the Legal literature made a major step forward in accurately informing its readership about pyromania in a recent Annotation entitled, "Pyromania and the Criminal Law" in the *American Law Reporter* (33), anyone studying court decisions for

information about pyromania could easily come away grossly misinformed.

It is ironic that the popular press, in the wake of a series of sets of recent fires across the United States, is providing more accurate information about pathological firesetting to law and fire officials than is their own literature (34,35). If law enforcement and fire safety personnel are to be better informed about pyromania, and our data show they are poorly informed now, there must be considerably more cross fertilization between those professions and psychiatry than is currently taking place. Our data also show that professionals are differently informed independent of their training and reflective of their gender/age cohort, their geographic location, and their years of experience. Future training must heed these variables. Serial arsonists, both with and without pyromania, are simply too destructive a force to allow parochial professional turf to interfere with the effective sharing of information about pathological firesetting. The FBI Center for the Analysis of Violent Crime finds that states generally rely on outdated data and many do not generate training materials based on current research. So how should future training be done?

The Federal Emergency Management Agency (FEMA)-United States Fire Administration (USFA) might take the lead. FEMA-USFA which publishes the *Arson Resource Directory* (36) might broaden its scope by adding psychiatric/psychological resources to its otherwise excellent and inclusive listings. Likewise, when FEMA-USFA convenes its next arson forum, as it did in 1993 (37), better representation by psychiatrists and psychologists could further cross fertilization. Finally, FEMA-USFA's technical support of arson prosecution (38) might also include directives on the use of the psychiatric expert.

Consideration has been given to creating a program for serial arsonists along the lines of the FBI's Violent Criminal Apprehension Program (VICAP). Whether this is expandable to serial arsonists is questionable because arson often leaves less unique evidence and arsonists provide less signature behavior than do other serial offenders. Nonetheless, there is the Arson Information Management System (AIMS) which is "an interactive, custom programmed, structured implementation of relational data files that contain arson-related material" (36). Multidisciplinary modifications of future versions of AIMS might assist in better handling of pathological firesetting.

Finally, the National Emergency Training Center Learning Resource Center in Emmitsburg, Maryland might develop curricula and support materials that jointly present information about serial arsonists and pyromania from the law enforcement and psychiatric perspectives. This facility, which is the campus library for students attending the National Fire Academy, the Emergency Management Institute, and other training programs sponsored by FEMA does not provide such information at this time.

News item: "A former firefighter. . .pleaded guilty to starting two fires. . . . The fires. . .burned nearly 160 acres in the White Mountain National Forest and 60 acres of private property. . . . [The firesetter] was arrested while sitting on a nearby hill, watching the flames" (39). Will future law enforcement and fire safety professionals label firesetters like this with the diagnosis of pyromania when that is appropriate, and not do so when it is not? That will depend on the ability of these two professional groups and psychiatry to educate each other about why individuals set fires, and particularly about the different motivations for serial arson.

Acknowledgments

The authors thank Tim Huff, F.B.I. and Gordon P. Gray, Bureau of Alcohol, Tobacco and Firearms for assistance in the preparation of this paper.

References

1. Anonymous. Church arson. USA Today 1996 Jul 11;3A.
2. Geller JL, Erlen J, Pinkus RL. A historical appraisal of America's experience with 'pyromania'—A diagnosis in search of a disorder. Int J Law Psychiatry 1986;9(2):201–9.
3. Lewis NDC, Yarnell H. Pathological Firesetting (Pyromania). (Nervous and Mental Disease Monograph, No. 82). New York, Coolidge Foundation, 1951.
4. American Psychiatric Association Diagnostic and Statistical Manual. 3rd rev. ed. Washington DC: American Psychiatric Assn 1987.
5. Karter MJ. Fire loss in the United States in 1994. NFPA 1995;89(5):93–100.
6. Fire in the United States 1983–1990. Emmitsburg MD: National Fire Data Center, n.d.
7. Lait M, Brazil J. Transient held in devastating Laguna fire. Los Angeles Times 1994 Oct 1;1.
8. Geller JL. Arson in review. From profit to pathology. Psychiatr Clin North Am 1992;15(3):623–45.
9. Barker AF. Arson. A Review of the psychiatric literature. Oxford: Oxford Univ Press, 1994.
10. Barnett W, Spitzer M. Pathological firesetting 1951–1991: a review. Med Sci Law 1994;34(1):4–19.
11. Prins H. Fire-Raising: Its Motivation and Management. Routledge, London, 1994.
12. Puri BK, Baxter R, Cordess CC. Characteristics of fire-setters. Br J Psychiatry 1995;166:393–6.
13. McElroy SL, Hudson JI, Pope HG, Keck PE, Aizley HG. The DSM-III-R impulse control disorders not elsewhere classified: clinical characteristics and relationship to other psychiatric disorders. Am J Psychiatry 1992;149(3):318–27.
14. Soltys SM. Pyromania and firesetting behaviors. Psychiatric Annals 1992;22(2):79–83.
15. Stein DJ, Hollander E, Liebowitz MR. Neurobiology of impulsivity and the impulse control disorders. J Neuropsychiatry Clin Neurosci 1993;5(1):9–17.
16. Geller JL. Communicative arson. Hosp Community Psychiatry 1992;43(1):76–7.
17. Geller JL, Fisher WH, Bertsch G. Who repeats? A follow-up study of state hospital patients' firesetting behavior. Psychiatr Q 1992;63(2):143–57.
18. Geller JL. Pathological firesetting in adults. Int J Law Psychiatry 1992;15(3):283–302.
19. Geller JL, Fisher WH, Moynihan K. Adult lifetime prevalence of firesetting behaviors in a state hospital population. Psychiatr Q 1992;63(2):129–42.
20. Leong GB. A psychiatric study of persons charged with arson. J Forensic Sci 1992;37(5):1319–26.
21. Stewart LA. Profile of female firesetters. Br J Psychiatry 1993;163:248–56.
22. Rix KJB. A psychiatric study of adult arsonists. Med Sci Law 1994;34(1):21–34.
23. Virkunen M, Eggert M, Rawlings R, Linnoila M. A prospective follow-up study of alcoholic violent offenders and firesetters. Arch Gen Psychiatry 1996;53(6):523–9.
24. Harris GT, Rice MB. A typology of mentally disordered firesetters. J Interpersonal Violence 1996;11(3):351–63.
25. Orr J. Profiles in arson: The vanity firesetter. American Fire Journal 1989;41(7):24–7, 33–5, 47.
26. Krzeszowski FB. What sets off an arsonist. Security Management 1993;37(1):42–7.
27. White EB. Profiling arsonists and their motives: An update. Fire Engineering 1996;149(3):80–6.
28. Toole v. State 479 So. 2d 731.
29. State v. Blanco 371 N.W. 2d 406.
30. State v. Stewart 467 So. 2d 467.

31. State v. Stewart 493 So. 2d 227.
32. People v. Overman 542 N.E. 2d 1250.
33. Toole v. State 51 ALR 4th 1231.
34. Warrick P. Inside the brain of an arsonist. Los Angeles Times 1993 Nov 17;E 1–2.
35. Long P. What fuels FSU arsonist's rage? Miami Herald 1996 Feb 4;1B.
36. Arson Resource Directory. n.p., Federal Emergency Management Agency-United States Fire Administration, 1993.
37. Arson Forum Report. n.p., Federal Emergency Management Agency-United States Fire Administration, 1993.
38. Arson Prosecution: Issues and Strategies. n.p., Federal Emergency Management Agency-United States Fire Administration, 1988.
39. Anonymous. Former firefighter admits N.H. arson. Boston Globe 1992 Dec 29;19.

Additional information and reprint requests:
Jeffrey L. Geller, M.D., M.P.H.
University of Massachusetts Medical Center
Department of Psychiatry
55 Lake Avenue North
Worcester, MA 01655