

## Female Arsonists

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Arson has long been a subject of interest to the psychiatrist. In the early nineteenth century, continental psychiatrists in particular maintained that pyromania was a form of insanity, and laws were enacted in the German States and in France to protect such persons from the death penalty. The underlying sexual roots of arson have been stressed (e.g. Stekel, 1924), and although Reiss (1909) suggested that it might represent any form of displaced emotional reaction to tension, and McKerracher and Dacre (1966) that it might represent displaced aggression, the view of a sexual basis for arson is still commonly held.

Lewis and Yarnell (1951) have stated that in the earliest continental literature 'firesetting was predominantly the crime of the retarded female adolescent'; nevertheless over the years there has been a decreasing proportion of arsonists who are female. Mönkemoeller (1912), reviewing the case literature, reported that 37 per cent of the offenders were female. In Lewis and Yarnell's series 14.8 per cent were female. In England female arson seems always to have been uncommon; indeed Baker (1892) stated that arson was rarely committed in England by a female of any age. Apart from the study by Lewis and Yarnell and isolated case reports (e.g. Macht and Macht, 1968), little has been written about female arsonists in the last fifty years. This paper reports on some of the characteristics of the female

arsonists who are in the English Special Hospitals.

### METHOD

The three Special Hospitals (Broadmoor, Rampton and Moss Side) are provided under the 1959 Mental Health Act for the care of psychiatric patients of dangerous, violent or criminal propensities. The case notes of all female patients in these hospitals were examined, and 56 patients who had been involved in firesetting in inappropriate circumstances after the age of 14 were thus identified. A control group matched for age (within 1 year) and length of current admission (within 1 year) was selected. Information relating to the previous social, criminal and psychiatric history of both groups of patients was obtained from the case notes and by means of a semistructured interview carried out by the psychiatrist in charge of the patient. All patients were seen also by a psychologist, when intelligence was assessed on the W.A.I.S. The E.P.I. (Form A) and the Middlesex Hospital Questionnaire were completed by 34 patients and their controls.

### RESULTS

The 56 arsonists comprised 11 per cent of the total Special Hospitals female population. The proportion found in each of the three hospitals, together with their mean age and length of stay is shown in Table I.

TABLE I  
*Hospital, age and length of stay of arsonists*

Hospital	Number in study	% Resident female population	Mean age in years	Mean length of current admission in months
Broadmoor ..	15	13%	28.9	17.6
Moss Side ..	8	11%	21.3	10.9
Rampton ..	33	10%	25.7	22.6
	56	11%	25.8	20.1

There are many factors that may determine any particular patient's admission to hospital. In Table II an attempt has been made to summarize the factors stressed as being important at the time an application was made for these patients to be admitted to the Special Hospitals. These factors are long term behaviour patterns and not just isolated events. More than one factor may have been stressed; there are more factors than patients and the categories are not mutually exclusive.

TABLE II  
*Pattern of behaviour preceding admission*

	Arsonists	Controls
Physical aggression to others .. ..	18	51
Damage to property .. ..	35	6
Danger to self .. ..	9	9
Other .. ..	3	3

Arson or attempted arson was mentioned in respect of 22 of the 35 references to damage to property in the index group. Significantly more control patients have a history of aggression to others preceding admission ( $p < .01$ ) and significantly more arsonists a history of damage to property ( $p < .01$ ).

Although significantly more arsonists than controls (A 38, C 23,  $p < .05$ ) were admitted under orders made under Part V of the 1959 Mental Health Act, this is explicable in terms of patients in the arsonist group actually being prosecuted for arson.

#### SOCIAL DATA

There were no apparent differences in racial

origins or social class of the two groups, although it was difficult to assign social class in many cases. Both groups came predominantly from social classes 3, 4 and 5. Some social data is presented in Table III.

Separation was defined as continuous absence of the parent for six months or more. Where a child was adopted before the age of six months the adoptive parents were considered as natural parents as far as separation was concerned (3 arsonists, 2 controls). Separation from parents occurred significantly more often in arsonists

TABLE III  
*Family status*

	Arsonists (n = 56)	Controls (n = 56)	p
Illegitimate .. ..	15	6	< .05
<i>Separation from parents</i>			
Father 0-3 .. ..	21	7	< .05
between 3 and 12 .. ..	7	7	N.S.
Mother 0-3 .. ..	21	5	< .02
between 3 and 12 .. ..	7	7	N.S.
Both 0-3 .. ..	19	5	< .05
between 3 and 12 .. ..	6	3	N.S.

than controls in the period before the age of 3 years; there was no difference in frequency of separation occurring after this age. In terms of other social factors, early institutionalization, type of schooling and work record, there were no significant differences between the two groups.

The sexual development of these two groups was considered in some detail. Some of the available information is shown in Table IV.

TABLE IV  
*Sexual development*

	Arsonists (n = 56)	Controls (n = 56)	p
Severe dysmenorrhea .. ..	24	8	< .01
Age of onset of menstruation .. ..	12.6 S.D. 1.7	13.1 S.D. 1.7	N.S.
Age first sexual experience .. ..	15.2 S.D. 2.4	20.1 S.D. 2.1	< .01
No sexual experience .. ..	15	20	N.S.
Married .. ..	1	13	< .01
Number of pregnancies .. ..	56	23	
Convictions for prostitution .. ..	17	0	< .01
Promiscuous .. ..	33	8	< .001

In general, the arsonists appeared to have more problems related to their sexual relationships than the control group, and this was supported by expressed attitudes on sexual problems.

In terms of psychiatric symptomatology there were no significant differences between the two groups—psychotic episodes in which delusions and/or hallucinations were reported by the patient had occurred in 29 of the arsonists and 22 of the controls. Suicide had been attempted by 29 arsonists and 33 controls. Self mutilation had occurred in 29 arsonists and 22 controls. Similarly, there was no difference in mean age of first psychiatric contact (Arsonists 18.9 SD 5.6. Controls 19.2 SD 6.03) or length of time spent in hospital. The psychiatric status of the two groups is shown in Table V.

TABLE V  
*Psychiatric status*

	Arsonists	Controls
<b>Mental Health Act classification</b>		
Mental illness ..	12	17
Psychopathic disorder	34	24
Subnormality ..	7	12
Severe subnormality	3	3
<b>Diagnostic categories*</b>		
Schizophrenia ..	17	16
Depression .. ..	5	5
Psychopathy ..	32	22
Subnormality ..	17	21
Other .. ..	1	2

\* Represents all diagnostic labels applied to patients in the previous five years.

It will be apparent that the label of psychopathy was attached more frequently to the arsonists than to the controls, but the difference was not significant at the 10 per cent level. A diagnosis of a psychotic disorder had been made with equal frequency in both groups, but the secondary diagnosis of co-existing personality disorder seemed to be more frequently made in the arsonist group.

Results on tests of intelligence were available for all patients, but other psychological test data was available for only 34 of the matched pairs. Results are shown in Table VI.

#### FIRESETTING ACTIVITIES

The 56 arsonists were responsible for 111 fires; 12 (21 per cent) had set only one fire, 34 (61 per cent) two fires and 10 (18 per cent) three or more fires. Only 27 (47 per cent) had ever been prosecuted for arson.

Reasons or motives underlying events are always difficult to determine and may be assigned according to preconceived ideas. In Table VII apparent motives based on events immediately preceding the arsonist activity, together with the situation in which the event occurred, are shown.

Of all the offences 39 per cent occurred in a setting of direct conflict with authority. Those listed as motivated by revenge were enacted against someone not in authority over the patient. The site of the fire was in 77 cases (69 per cent) in the immediate living area of the patient; 7 of the fires involved attempted self-immolation, and in several others it was only the efforts of outside observers that prevented the individual being damaged. In cases of multiple arson no one situation or one motive necessarily prevailed (or was assumed to prevail) in all the episodes.

#### DISCUSSION

The prevalence amongst female patients (11 per cent) is higher than figures given by Le Couteur (1966) for Broadmoor Hospital, but in that study he was referring to those actually admitted for arson. It is of interest that less than a half of these women had ever been prosecuted for arson; a factor which might contribute to explaining the supposed rarity of arson amongst women.

The results of this study suggest that arsonists differ in a number of respects from other Special Hospital patients, and confirm, at least for this group, some of the previously reported findings about female arsonists. Some of the differences, namely, the source of referral and the legal category under which they are detained, can be accounted for by their arsonist activities.

It might be argued that this study reports on a comparison between a group of primarily behaviour disordered patients and a group of patients suffering from more formal psychiatric

TABLE VI  
Psychological testing (mean scores)

Intelligence—total group	77.5 S.D. 9.4	78.5 S.D. 8.9	
—sub group	80.5 S.D. 6.4	80.4 S.D. 5.9	
<i>Sub group</i>			
Middlesex hospital Questionnaire			p
Anxiety	8.00	7.50	N.S.
Phobic	5.97	6.35	N.S.
Obsessional	8.73	8.14	N.S.
Somatic	5.91	5.67	N.S.
Depressive	8.02	6.83	< .05
Hysterical	7.76	6.33	< .05
Eysenck Personality Inventory			
E	13.50	12.76	N.S.
N	14.61	12.94	< .01
L	3.65	4.05	N.S.

TABLE VII  
Situation and motivation of firesetting

Reason	Response to conflict with authority	Revenge	Self destruction	Attention seeking	Other (incl. delusional)	Total
<i>Place</i>						
Hospital .. ..	27	5	3	2	—	37
Own home .. ..	—	10	3	12	2	27
Prison/Borstal ..	12	—	1	—	—	13
Relative or boy friend's home .. ..	—	10	—	—	5	15
Place of work ..	1	2	—	1	—	4
Other (telephone kiosks, churches, shops) .. ..	3	—	—	2	10	15
<b>Total .. ..</b>	<b>43</b>	<b>27</b>	<b>7</b>	<b>17</b>	<b>17</b>	<b>111</b>

disorder. Although the label of psychopath had been attached more often to those in the arsonist group it had also been used very frequently in the control group, and the difference between the two groups was not significant. In respect of previous psychiatric symptomatology, age of first psychiatric contact and mean length of hospitalization there were no differences between the two groups. Both groups were characterized by disorders of behaviour, but they differed in their manifestation of the disorders.

The findings are in accord with those of Lewis and Yarnell in that one can infer an unsatisfactory early upbringing from the high incidence of early parental separation. Separation

from mother or father was equally common, and there is nothing in these findings to support an inference of an idealization of the father and a particular hatred for the mother. Emphasis has also been laid on the disturbed sexual relationships shown by these women and this is confirmed by this study. Despite their involvement in many and varied sexual activities, these women expressed little interest or pleasure in them, and the inference drawn by Lewis and Yarnell of an underlying sexual frigidity and a drive towards infidelity whilst looking for a perfect relationship could also be extended to these findings. There was no indication that they were aggressively cruel or that precipitants in any but a few cases could be related to sexual

anxieties, menarche, pregnancy or menopause (the exceptions being those where the arsonist set fire to the house of a sexual partner). Again, in common with Lewis and Yarnell's findings, the majority of acts were against their own property, or at least the area of property symbolically owned by them within an institution. In numerous instances they either were, or might have been, injured by the blaze, a finding in keeping with the view that their fire-raising is often an attention-seeking manoeuvre in which they are the heroic victims.

If one makes the basic assumption that aggression, both to the person and against property, are in the main responses to frustrating events (or at least events perceived by the patients as frustrating), then it is in the pattern of the response that the two groups differ. Both can be considered as maladaptive in that there are insufficient alternative controls or pathways for more socially acceptable expression of tension and anxiety. In the one group there is direct externalization, in the other externalization only in a substitute form. In our present state of knowledge (c.f. Kendell, 1970) it is reasonable to postulate that depression represents internalized aggression, and the finding that the arsonist group score more highly on the N score of the EPI and the D and H scores of the Middlesex Hospital Questionnaire would add weight to the view that the arsonists have more difficulty in externalizing their aggression.

The alternative explanation of a sexual basis for arson is supported if a correlation between disordered sexual development and identification and arsonist activities is accepted as evidence for this. The disorder of sexual development might also be explained in terms of the subjects early environmental experiences, poor identification in either a male or female parent, insecurity, a search for any love object (many relationships) or a need for possessions (many illegitimate children). Could the differences in early environmental experience also be invoked to explain differences in response to frustrating events? In animal studies (Schaeffer, 1968) early stress in the form of electric shocks, or handling, does alter later

adaptational response. Those not so handled are often more inhibited and develop less rapidly. In humans there seem to be no studies in which effects of early and late separation on patterns of adaptive response to frustrating events have been studied. Separation in general has been related to the development of unsocialized aggressive behaviour patterns (Hewitt and Jenkins, 1946).

Why arson, as opposed to other forms of behaviour, should be chosen as the means of expression on a direct sexual or indirect tension model is still conjectural. Mythology (Frazer, 1930) consistently implicates woman in man's acquisition of fire, and similarly literature abounds in metaphors which allude to the power of fire. More enlightenment as to the aetiology of firesetting will only come from further studies.

#### SUMMARY

A group of female arsonists in the Special Hospitals were compared on social, psychological and psychiatric data with a group of matched controls. Significant differences were found to exist between the two groups in respect of early environment, sexual behaviour and overt aggressive behaviour. Otherwise the female arsonists showed many of the features described in other studies.

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A synopsis of this paper was published in the June 1971 *Journal*.

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(Received 2 December 1970)