

P. N. Cooper,<sup>1</sup> MRCPath. and C. M. Milroy,<sup>2</sup> MRCPath.

## Violent Suicide in South Yorkshire, England

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**ABSTRACT:** Differences in the characteristics of those individuals choosing violent methods of suicide in South Yorkshire were studied. With the exception of jumping from a height, these methods were more frequently used by males, with a particular male predominance in deaths due to self-immolation, railway collision, hanging, firearms, and electrocution. The most potentially painful/disfiguring methods of suicide, jumping from a height, self-immolation, and railway deaths, were favored by the young. Drowning, stabbing and cutting and electrocution were common among the elderly. Severe mental illness was common amongst those choosing some of the most painful or disfiguring modes of death (jumping from a height; self-immolation; cutting/stabbing and road traffic "accidents") particularly when compared to the principal alternative of hanging. The same group of causes of death was associated with a high proportion of individuals who had previously attempted suicide. Severe mental illness was not so obviously a feature of the railway or firearm deaths.

Hanging represented more than half the cases included in the study and showed a sex ratio of over 4 to 1 in favor of males. However, all seven individuals of non-European origin, six of whom were female, chose to hang themselves. Whereas half of the females aged under 40 jumped from a height, hanging was the method of choice in the age group 40 to 59. Among males, hanging was particularly favored by those with what might be considered an impulsive reason for suicide, namely, the end of a relationship with a member of the opposite sex. A high proportion of these were intoxicated with alcohol and a high proportion left a suicide note.

**KEYWORDS:** pathology and biology, suicide

In 1991, in England and Wales 3893 people were recorded as committing suicide [1]. However this is an underestimate as it is frequently not possible to be sure that an individual intended to take his own life. H. M. Coroner can only return a verdict of suicide if the evidence of intent is beyond reasonable doubt. Thus as many as one third of successful self-destructive acts receive verdicts other than suicide in the Coroner's Court [2,3].

Violent, immediately fatal, or active methods of suicide are said to be used by males [4-9], particularly older white males [7]. The elderly are said to have a greater intent to succeed when attempting suicide [10], and thus may choose more predictably fatal methods. It is generally found that the proportion of severely mentally ill patients increases with the violence of the method [11-14]. However, studies on violent/active methods of

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<sup>1</sup>Senior Lecturer in Forensic Pathology, Department of Pathology, Royal Victoria Infirmary, Queen Victoria Road, Newcastle upon Tyne, England.

<sup>2</sup>Senior Lecturer in Forensic Pathology, Department of Forensic Pathology, University of Sheffield, Medico-Legal Centre, Sheffield, England.

suicide have tended to concentrate on one particular method and have not compared the characteristics of the individuals choosing the different violent methods. The aim of this study was to undertake this comparison.

### Materials and Methods

The Coroner's records of all cases where an inquest was held into a death occurring in the South Yorkshire (West) Coroner's district during the years 1985 to 1991 were examined. Cases with an Open verdict (330 cases) or Suicide verdict (323 cases) were retrieved and reviewed. Of these 653 cases, 117 were deaths other than due to self-destructive behavior. The remaining 536 cases came within our working definition of suicide—"any act of self-damage which on the balance of evidence (not just beyond reasonable doubt) was considered to be deliberately intended and which resulted in the individuals death." Intention was inferred on the basis of either; a suicide note; prima facie evidence of intent; or circumstantial evidence as to the most reasonable and probable explanation for the death [15]. Of these 246 were by violent methods.

For each case the sex, age, race, occupation, and marital status of the deceased, the method of suicide, history of previous suicide attempts, presence of a suicidal note and presence of drugs *or* alcohol at postmortem examination were recorded.

Statistical analysis was performed by constructing  $2 \times 2$  and  $2 \times 3$  contingency tables and using the  $\chi^2$  test or if any of the numbers in the table were less than 5 Fisher's exact test.

### Results

#### *Sex of Victim*

Of the 246 cases, 64 were female and 182 male (♀:♂ Ratio 1:2.84). The only suicide method group not containing more males than females was jumping from a height. Suicidal railway deaths and self-immolation showed the most marked male predominance (Table 1).

#### *Age Range*

The overall age range was 15 to 94 with a median of 47 (female median 48; male median 45). The proportion of females increased with age from 22% of those under 40

TABLE 1—Violent suicide methods used by both sexes.

Suicide method	Total cases	♀	♂	♀:♂ Ratio
Self-immolation	12	1	11	1:11
Drowning	25	8	17	1:2.13
Electrocution	5	1	4	1:4
Jumping from a height	43	22	21	1:0.95
Gunshot	10	2	8	1:4
Hanging	129	25	104	1:4.16
Cutting/Stabbing	8	3	5	1:1.67
Railway death	10	1	9	1:9
Strangulation	1	—	1	—
Road traffic "accident"	3	1	2	1:2
Total	246	64	182	1:2.84

TABLE 2—Violent suicide method used by different age groups.

Suicide method	Age		
	< 40	40–59	> 60
Self-immolation	7	4	1
Drowning	1	8	16
Electrocution	1	1	3
Jumping from a height	21	10	12
Gunshot	5	2	3
Hanging	53	34	42
Cutting/Stabbing	0	3	5
Railway death	6	2	2
Strangulation	1	—	—
Road traffic "accident"	2	1	—
Total	97	65	84

to 29% of those of 40 years and more. Self-immolation and railway deaths were seen principally in those under 40 years old. Drowning, electrocution and cutting/stabbing occurred most commonly in those over 60 and rarely in those under 40 (Table 2).

Jumping from a height was most common in the under 40s for each sex (48% of females; 14% of males). Among males the proportion choosing this method of suicide decreased with age (40 to 59 : 13%; 60+ : 7%) but among females it was more popular with over 60s (33%) than 40 to 59 year olds (21%) (Table 3). These differences did not however reach statistical significance.

Among males, hanging was favored by a similar proportion of each age group (range 50% to 60.5% of individuals). Among females there was a much greater difference between the age groups with the middle age group most likely to choose hanging (58% of cases) compared to the young (33% of cases) and the old (29% of cases) ( $\chi^2 = 4.03$ ;  $P < 0.05$ ) (Table 3).

### Marital Status

Ninety-three of the 246 individuals were single (age range 15 to 83 years; median 33 years); 101 were married (age range 22 to 86 years; median 56 years); 26 divorced or separated (age range 23 to 64 years; median 42 years), and 23 widowed (age range 56 to 94 years; median 73 years). Three had unknown marital status. Seventy-nine of the 179 males (44%) were single compared to 14 of the 64 females (22%). Self-immolation (6/12), railway deaths (8/10) and jumping from a height (21/43) showed a high proportion of single people while drowning (17/23) and hanging (69/128) showed a high proportion of married and widowed individuals.

TABLE 3—Hanging and jumping from a height separated into groups by age and sex.

	< 40		40–59		60+	
	M	F	M	F	M	F
Jumping from a height	11	10	6	4	4	8
Hanging	46	7	23	11	35	7
Total cases	76	21	46	19	60	24

### *Occupation*

The occupation was unknown in 28 cases. There were eleven students (age range 15 to 22 years; median 17 years); 39 unemployed (age range 18 to 64 years; median 31 years); 16 housewives (age range 23 to 71 years; median 49 years); 71 with manual occupations (age range 17 to 64 years; median 38 years); 19 professionals (age range 33 to 67 years; median 46 years) and 62 retired persons (age range 48 to 89 years; median 71 years). Five of the eleven students died as a result of jumping from a height. Of the 12 self-immolators four were unemployed. Five housewives chose drowning and only four chose hanging. Of the eight cases due to cutting/stabbing four were retired.

### *Predisposing Factors*

The major predisposing factor for each case mentioned in the coroner's files are shown in Table 4. There were six types of death that contained ten or more cases. Depression was the most common factor in each of these groups and ranged from 22% of hanging cases (28 out of 124) to 40% of jumping cases (17 out of 43). In general those modes of death which were most potentially painful and/or disfiguring (jumping from a height; self-immolation; cutting/stabbing; road traffic "accident") were associated with a greater proportion of individuals with serious mental illness (schizophrenia or depression) than the other causes of death. All these individual groups were too small for statistical comparison to produce significant results except for the jumping from a height group which showed serious mental illness significantly more often than other causes of death ( $\chi^2 = 10.51$ ;  $P < 0.005$ ) and particularly schizophrenia among males ( $\chi^2 = 6.25$ ;  $P < 0.05$ ). Five of the eleven schizophrenics (all of whom were male) chose jumping from a height. Two of the three individuals who jumped in front of a car suffered from severe schizophrenia and the third was one of the two cases of postnatal depression. Two of the more violent forms of death, firearm and train deaths, showed a low rate of mental illness. The jumping from a height, self-immolation, cutting/stabbing and road traffic accident groups were combined and compared for mental illness with the rest of the violent suicide population and with the hanging group. This group of suicide methods showed significantly more mental illness in each comparison ( $\chi^2 = 4.57$ ;  $P < 0.05$  and  $\chi^2 = 9.5$ ;  $P < 0.005$ ).

The drowning category showed the greatest proportion (20%) of suicide due to physical illness ( $\chi^2 = 1.38$ ;  $P = \text{N.S.}$ ) apart from the small group of five electrocution cases of whom three killed themselves because of ill health. Of hanging cases 18% (23 out of 129) killed themselves as a result of the end of a relationship compared to 6% (7 out of 117) in all other causes of death ( $\chi^2 = 8.04$ ;  $P < 0.01$ ). Only 1 of 43 cases of jumping from a height and none of the drowning cases killed themselves for this reason (Fisher's  $P < 0.05$  in each case). Among those killing themselves because of the end of a relationship a high proportion tested for alcohol were positive (9/16 : 56%) compared to those with other reasons for suicide (29/114 : 25%) ( $\chi^2 = 10.24$ ;  $P < 0.005$ ). Most individuals with this reason for suicide (20/30) were males under age 40. Thirteen of the 17 cases where the main reason was financial or loss of employment chose hanging compared to 116 out of 229 for other types of death (Fisher's  $P < 0.05$ ) but this method was chosen by only one of the seven individuals who killed themselves as a result of previous criminal activity (Fisher's  $P = 0.056$ ).

### *Previous Suicide Attempts*

Eighty-seven cases (35%) were recorded as having previously attempted suicide. This represents 50% of females (32 out of 64) but only 30% of males (55 out of 182) ( $\chi^2 = 8.10$ ;  $P < 0.01$ ).

TABLE 4—Characteristics of the individuals using different violent suicide methods.

Suicide method	Total cases	Principal factor							Suicide note (%)	Alcohol detected (%)
		Depression	Physical illness	End of relationship	Financial or loss of employment	Previous suicide attempt (%)	End of relationship	Financial or loss of employment		
Self-immolation	12	4	2	1	1	9	1	9	1	3/7 (43)
Drowning	25	8	5	...	...	5	...	5	9	1/16 (6)
Electrocution	5	1	3	1	...	2	...	2	5	2/3 (67)
Jumping from a height	43	17	3	1	1	20	1	20	8	7/27 (26)
Gunshot	10	2	2	1	—	1	—	1	3	0/3 (0)
Hanging	129	28	16	23	13	46	13	46	38	19/59 (32)
Cutting/Stabbing	8	3	—	—	1	2	1	2	3	0/2 (0)
Railway death	10	—	—	3	1	0	1	0	3	5/10 (50)
Strangulation	1	—	—	—	—	0	—	0	1	1/1 (100)
Road traffic "accident"	3	1	—	—	—	0	—	0	—	0/3 (0)
Total	246	64	31	30	17	87	17	87	71	38/130 (29)

NOTE: Other stated principal factors were—miscellaneous personal problems—20; criminal act—7; schizophrenia—11; death of a spouse, parent or sibling—20; no known cause—46.

Age did not affect the proportion of females who had previously attempted suicide but in the male population the proportion decreased with age (38% (29 of 76) of those under 40; 30% (14 of 46) of 40 to 59 year olds; 20% (12 of 60) of the over 60s). This did not quite reach statistical significance ( $\chi^2 = 5.24$ ;  $P = 0.074$ ). The combined jumping from a height, self-immolation, cutting/stabbing and road traffic accident group had attempted suicide previously more often than the rest of the violent suicide population ( $\chi^2 = 6.15$ ;  $P < 0.05$ ).

### *Suicide Notes*

Suicide notes were left by 71 individuals (29%). This represented 32% of males (58 out of 182) but only 20% of females (13 out of 64) ( $\chi^2 = 3.08$ ;  $P = \text{N.S.}$ ). Males under 40 were more likely to leave a suicide note (39% (30 of 76) under 40s; 26% (28 of 106) of 40 and over ( $\chi^2 = 3.48$ ;  $P = \text{N.S.}$ ). Thirty-two percent (6 of 19) of females between 40 and 59 left a note, 15% (3 of 21) of those under 40 and 12.5% (4 of 24) of those over 59 ( $\chi^2 = 3.05$ ;  $P = 0.081$ ).

The only group in which more than half the individuals (16/28) left a suicide note was the end of relationship group that was predominantly male (25/28). This was significantly more frequent than other cause of death groups ( $\chi^2 = 12.31$ ;  $P < 0.001$ ). None of the eleven schizophrenics left a note (Fisher's  $P < 0.05$ ) and only eleven of the 64 cases (17%) due to depression ( $\chi^2 = 5.74$ ;  $P < 0.05$ ). In all the other groups of five cases or more between 23% (spouse died group) and 43% (financial problems group) left a note. Those who had previously attempted suicide were less likely to leave a suicide note (18/87; 21%: 53/159; 33%) ( $\chi^2 = 4.38$ ;  $P < 0.05$ ).

### *Ethnic Groups*

Only seven of the cases of violent suicide involved individuals of non-European origin (two Arabic, two Chinese and three Indo-Pakistani) and all seven chose hanging (Fisher's  $P < 0.05$ ). Six of these were women representing 24% of the female hanging cases (Fisher's  $P < 0.005$ ). In contrast only 1 of the 104 male cases of hanging was non caucasian.

Four of the seven non-European origin group had a history of previous suicide attempts. None of the seven was recorded as leaving a suicide note.

### *Role of Alcohol*

Alcohol was detected in blood samples from 38 of the 130 cases tested (29%) comprising 32 out of 96 males (33%) and 6 out of 34 females (18%) ( $\chi^2 = 2.99$ ;  $P = \text{N.S.}$ ). Of these 38 cases 24 (63%) had levels in excess of 100 mg/dL (4 females, 20 males).

Twenty-five of the 38 positive for alcohol were males under 40. Half of the males under 40 tested had alcohol in the blood compared to 16% of the other individuals tested ( $\chi^2 = 16.95$ ;  $P < 0.001$ ).

Suicide methods favored by young males showed the highest percentage of alcohol positive cases (self-immolation 3/7 (Fisher's  $P = \text{N.S.}$ ); railway deaths 5/10 (Fisher's  $P = \text{N.S.}$ )) while drowning, favored by the elderly, showed a very low prevalence of alcohol intoxication (1/16) (Fisher's  $P < 0.05$ ).

Individuals leaving a suicide note were more likely to have alcohol in their blood (18/42: 43%) compared to those who did not leave a note (20/88: 23%) ( $\chi^2 = 5.57$ ;  $P < 0.05$ ).

Alcohol was found less often in the blood of those killing themselves because of physical illness (0/12) (Fisher's  $P < 0.05$ ), schizophrenia (0/3) (Fisher's  $P = \text{N.S.}$ ) or

depression (3/32) ( $\chi^2 = 8.09$ ;  $P < 0.01$ ) and more often in those killing themselves because of the end of a relationship (9/16) ( $\chi^2 = 6.44$ ;  $P < 0.05$ ) compared in each case to the remainder of the sample.

The presence of drugs was tested for in 53 cases, seven (13%) were positive (Cannabinoids  $\times 2$ ; Amphetamine; Aspirin; Temazepam (overdose); Paracetamol  $\times 2$  (overdose). Five of the seven positive for drugs were aged less than 40 (4 females; 1 male).

## Discussion

Any study of suicide based on the files kept by H. M. Coroner will provide incomplete data particularly as to the motivation behind the act and the presence or absence of significant mental or physical illness. However, the prevalence of previous suicide attempts in the current study (35%) is similar to that previously reported [4,16,17,18] and rather higher than Seager and Flood's figure of 16% for the overall suicide population [2]. Furthermore, in this study a greater proportion of females than males had previously attempted suicide ( $\chi^2 = 8.10$ ;  $P < 0.01$ ) as previously shown by Morris [4] and a similar proportion (29%) to that previously quoted [2,4,17] left a suicide note. The proportions of cases where, for example, physical illness, death of a relative or previous psychiatric illness was felt to be important in the suicide decision are similar to those given by Seager and Flood for the general suicide population [2]. Thus, the results do allow a comparison of the characteristics of the individuals choosing different methods of violent suicide.

As expected from the literature [4–9], with the exception of jumping from a height, violent methods of suicide were more frequently used by males. Two studies on suicidal jumping from a height in the U.K. have previously shown a female predominance [5,19], but official figures for England and Wales [1] agree with a previous study by Isbister and Roberts [20] in Glasgow, Scotland in giving a male to female ratio of around 2.5 to 1. There was particular male preponderance in the self-immolation, railway, and hanging deaths. A previous study on self-immolation by Shkrum and Johnston [21] showed a male predominance but studies in the United States [22] and Australia and New Zealand [9] have shown a female predominance. Previous studies on railway suicide have shown that the users are principally male [23,24]. Hanging remains the most common violent means of suicide in the United Kingdom and is used predominantly by males [1,25–27]. Among females, hanging was favored by the middle age group ( $\chi^2 = 4.03$ ;  $P < 0.05$ ) but showed an even distribution among males of different age.

The most potentially painful/disfiguring methods of suicide (jumping from a height, self-immolation and railway deaths) were favored by the youngest age group ( $\chi^2 = 6.13$ ;  $P < 0.05$ ) and as expected each contained a high proportion of single people. This agrees with previous studies in Western countries on self-immolation [28,29] and railway suicides [14,23] but there is less unanimity regarding jumping from a height. In a study in Glasgow, Scotland, Isbister and Roberts found the typical jumper to be young and male [20], with an average age of 37.5 years while in London, Goonetilleke reported that it was favored by young women and elderly men [19]. In Florida, jumpers show a wide age range but are principally male and over 60 [30].

In this study, jumping was favored by the youngest group in both sexes and not surprisingly, a high proportion were unmarried. It was particularly popular among young females accounting for 10 of the 21 individuals in this group. A high proportion of students, who were principally young and male chose to jump.

The drowning, stabbing/cutting, and electrocution groups contained a large number of elderly individuals. This correlated with a high proportion of married and widowed individuals in the drowning group and of retired individuals in the cutting/stabbing group.

In a study in Miami, Florida, Copeland [31] noted a particularly old age group choosing drowning with 39% of the individuals being over the age of 70.

Most studies suggest that the more violent methods of suicide are favored by severely mentally ill patients [11-14] but Seager and Flood found no essential differences in the methods used by those with and without a previous psychiatric history, indeed there was a higher incidence of deaths due to drugs in those who had previous psychiatric illness [2].

In this study severe mental illness was most noticeable in the jumping from a height group when compared to other violent suicide methods ( $\chi^2 = 10.51$ ;  $P < 0.005$ ). This group also showed a high proportion of individuals who had previously attempted suicide (47%) ( $\chi^2 = 2.83$ ;  $P = \text{N.S.}$ ). In particular a high proportion of males killing themselves as a result of schizophrenia ( $\chi^2 = 6.25$ ;  $P < 0.05$ ) chose jumping from a height. It has previously been stated that jumping from a height principally occurs in individuals with a serious psychiatric disorder [12,13,32] and although this is an oversimplification, individuals who chose jumping from a height do appear to have a higher rate of schizophrenia [12,32], depression [20] and a past history of in-patient treatment [32]. Previous studies have also shown a high proportion with a history of suicide attempts [32,20].

Four of the 12 self-immolators committed suicide because of depression and a high proportion (75%) had previously attempted suicide (Fisher's  $P < 0.05$ ). This form of suicide is said to be associated with severe mental illness [21,28,33,34,35] and a past history of attempted suicide [21,22,36]. Two other small groups, the cutting/stabbing and the road traffic "accident" showed a high incidence of serious mental illness ( $2/8$  and  $3/3$ ). In a study of suicide using sharp instruments in Sweden, Karlsson found that 22 of the 89 cases had a history of psychiatric illness, 11 had previously attempted suicide and 25 left a suicide note [37]. Of the three cases of road traffic "accident" in this study, two suffered from severe schizophrenia and the third from post-natal depression. There is some evidence that women committing suicide in the year after childbirth tend to use more violent methods particularly self-incineration, falls, and trains [38].

Previous studies have shown a high rate of mental illness among suicidal deaths involving trains [14,23,24]. However, of our ten cases none was recorded as having killed themselves because of either depression or schizophrenia and none had previously attempted suicide. Half of the individuals tested were intoxicated with alcohol at the time of death.

Two of the 10 cases of death by firearm killed themselves as a result of depression. Lindekilde and Wang [14] have shown that of all methods of suicide shooting is the exception to the general rule that the proportion of mentally ill patients increases with the violence of the method used. Babigian [11] found a much greater proportion of American males *without* a psychiatric history committing suicide chose to shoot themselves (50%) than of males with a psychiatric history (20%).

Thus, in general, with the exception of the railway and firearm deaths, the more painful/disfiguring methods of suicide (jumping from a height; self-immolation; cutting/stabbing; road traffic "accident") were associated with serious mental illness and/or previous attempts at suicide more often than compared for example to the rest of the violent suicide population ( $\chi^2 = 4.57$ ;  $P < 0.05$  and  $\chi^2 = 6.15$ ;  $P < 0.05$ ).

Physical illness was most often the reason for suicide in the drowning and electrocution groups reflecting the older age associated with these forms of suicide. In a study of suicidal drowning in Miami, Florida, Copeland reported a similarly old population and a high proportion (11 of his 70 cases) killed themselves because of physical ill health [31].

The importance of alcohol in accidental, homicidal and suicidal deaths particularly in young males is well recognized [39]. Indeed, the suicide rate in a community has been shown to correlate with the level of alcohol consumption [40]. In this study, the indi-



viduals most likely to be intoxicated by alcohol at the time of death were young males ( $\chi^2 = 16.95$ ;  $P < 0.001$ ) and the methods favored by this group (self-immolation and railway deaths) showed among the highest prevalences of alcohol positivity. Those dying as a result of electrocution, hanging and jumping from a height also showed a high proportion with alcohol in the blood but there were relatively few cases of drowning positive for alcohol (Fisher's  $P < 0.05$ ). This is a feature of elderly suicide in general [41] but a recent study of drowning in Finland where drowning is a suicide method predominantly used by young men found blood alcohol positive in only 18% of cases, very low compared to that in other methods of suicide [42]. The single case in this study of suicidal self-strangulation was of a young man heavily intoxicated with alcohol.

Alcohol played little part in those killing themselves because of serious physical or mental illness (positive in 3 out of 47 cases) but was often present in those with a more impulsive reason for suicide, for example, the end of a relationship with a member of the opposite sex (9 out of 16 cases) ( $\chi^2 = 6.44$ ;  $P < 0.05$ ). This was also the group most likely to leave a suicide note (16 out of 30 cases) ( $\chi^2 = 12.31$ ;  $P < 0.001$ ). In many of these cases alcohol probably played an important part in arriving at the suicide decision. It is of interest that a very high proportion of the end of relationship group (77%) chose hanging as the method of suicide ( $\chi^2 = 8.04$ ;  $P < 0.01$ ) possibly because it is always so readily available.

Two of the more violent/disfiguring methods of suicide favored by the youngest age group (jumping from a height and self-immolation) showed the lowest proportion of individuals leaving a suicide note (19% and 1 out of 12 respectively). Copeland found a similarly low rate among self-immolators when compared to non-fire related suicides in the USA [22]. All five of the self-electrocutors left a suicide note frequently in the form of a warning to whoever found the body about the risk of electrocution. Of the largest group, the hanging cases, 29% left a suicide note, a rather higher figure than the 11.4% previously reported by Davison and Marshall in Northern Ireland [25].

All seven of the non-European origin cases of violent suicide chose hanging (Fisher's  $P < 0.05$ ). Six of these were women in contrast to the sex ratio of the white population choosing hanging (male to female ratio, 5.4 to 1) (Fisher's  $P < 0.005$ ). Immigrants from the Indian subcontinent to the UK show high suicide rates in young women but low suicide rates in men and the elderly of both sexes [43]. Self-poisoning as a method of suicide is much less common in Indian women (20% of cases) than in the general female population (65% of cases) whereas hanging (28% compared to 15%) and self-incineration (26.7% compared to less than 4.2%) are much more common [43]. Among Americans of Asian origin, there is also a particular preference for hanging [44]. Thus, the racial pattern for women of Asian origin favoring hanging appears to be maintained in South Yorkshire. However, none of the 12 self-immolators were of Asian origin.

## Conclusions

Most methods of violent suicide, particularly self-immolation, railway, hanging, fire-arm, and electrocution deaths are used more often by males than females and some of the most painful/disfiguring methods are favored by the youngest age group. In general, severe mental illness was associated with these more violent/disfiguring methods of suicide with the exception of railway and firearm deaths. Of those killing themselves because of the end of a relationship, nearly all young men, most were drunk, left a suicide note and chose hanging. The previously acknowledged preference of young women of Asian origin for hanging is confirmed in the present suicide population.

This study was limited by its retrospective nature, by the small number of cases using many of the different methods and by the fact that the only source of information used was the files of H. M. Coroner. Psychiatric assessment of individual cases was particu-

larly limited. However, it has shown that there are differences between the groups of individuals choosing different methods of violent suicide. What is needed now is a prospective, multidisciplinary and probably multicenter study of the characteristics of individuals choosing different suicide methods.

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Address requests for reprints or additional information to  
 Dr. P. N. Cooper  
 Department of Pathology  
 Royal Victoria Infirmary  
 Queen Victoria Road  
 Newcastle upon Tyne, NE1 4LP  
 England