Epidemiology of suicide pacts in England and Wales, 1988-92

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Abstract

Objective: To describe the epidemiology of suicide pacts in England and Wales

Design: Analysis of the death certificates and coroners' records of all people who died in pacts between 1 January 1988 and 31 December 1992.

Subjects: 124 people who committed suicide in 62 pacts.

Results: Suicide in a pact accounted for 0.6% of all suicides (124/19 721), a rate of 0.6 per million people aged 15 and over. Forty eight pacts were between married couples and five were between family members. The mean age was 56 years. 99 of the 124 subjects were of occupational social classes I-III. Poisoning by car exhaust fumes and drugs accounted for 116 deaths, with both members of each pair using the same method.

Conclusions: Suicide pacts are rare and less common than they were 35 years ago, although the epidemiological profile is similar. People who commit suicide in a pact are more likely than those who commit suicide alone to be female, older, married, and of a high social class.

Introduction

Most suicides are solitary and private, but a few result from a pact between people to die together.[1] We describe the epidemiology of a five year national series of such pacts, the first report for 35 years.

Subjects and methods

The Office for National Statistics provided death entries for the 19 721 suicides (codes E950-9 of ICD-9 (international classification of diseases, ninth revision)) [2] in people aged 15 and over that had been registered between 1 January 1988 and 31 December 1992. We considered that a suicide pact was possible in 160 cases in which two people had died within three days of each other in the same registration subdistrict and in six cases in which three people had died under these same circumstances. On examining the death certificates we found that 72 pairs of people shared a surname, address, or place of death. The coroners' inquest records for each pair showed that 10 pairs of deaths were unrelated. The 62 other pairs had planned to die together, and they form the study group.

Table 1 Numbers (percentages) of suicide pacts and solitary suicides by age and sex in England and Wales, 1988-92

	Suicide pact			Solitary suicide		
	Men (n=64)	Women (n=60)	Total (n=124)	Men (n=14 805)	Women (n=4792)	Total (n=19 597)
15-24	4 (6)	4 (7)	8 (6)	2093 (14)	384 (8)	2477 (13)
25-44	12 (19)	13 (22)	25 (20)	6206 (42)	1413 (30)	7619 (39)
45-64	22 (34)	20 (33)	42 (34)	4008 (27)	1495 (31)	5503 (28)
≥65	26 (41)	23 (38)	49 (40)	2498 (17)	1500 (31)	3998 (20)
Mean age (years)	57	55	56	45	53	48
Rate per million*	0.66	0.57	0.61	152	45	96

*Average per year in those aged 15 and over.

Results

Of the 62 pairs in suicide pacts, 56 were male-female pairs, four male-male pairs, and two female-female pairs. Forty eight pairs were husband and wife, five were close blood relatives (pairs of brothers, sisters, mother-son, father-son, and mother-daughter), four were lovers, three were cohabiting couples, and two were friends. Fifty seven pairs lived together in the same household and only two people lived alone. This is in contrast to people who commit suicide on their own, of whom only half are married and a quarter live alone.[3]

The 62 pacts occurred at an average of one a month over the five years. Twenty four suicide pacts occurred in the spring (April-June), a seasonal excess similar to that for solitary suicides. Clustering, which might suggest imitation of pacts reported in the media, was absent.

Age and sex distribution—The ratio of males to females in suicide pacts was 1:1, which is different from the ratio of 3:1 in solitary suicide (table 1). The mean age of people committing suicide together was higher than that of those committing suicide alone. This was especially evident in males because of the comparative lack of males aged 15-45 in suicide pacts, men of this age showing an increased suicide rate during the 1980s.[4] Nearly half of the sample (54/124) was in social class I or II and 80% (99/124) was in class I, II, or III.[5-9] Eleven people worked in professions related to medicine.

Children—Twenty seven of the 48 marriages were childless. Three children (aged 2, 4, and 6) died with their parents, their deaths being classified as homicide by the coroner. Of the 17 surviving children under 18, one lost both parents and 16 lost one parent. These 16 children all lived with the surviving parent, who had been divorced or separated from the parent who committed suicide.

Means of death—Couples used non-violent methods, which permitted painless, synchronised death together (table 2). This suggests premeditation and cooperation, without coercion of one partner by the other. Both members of all pairs used the same method of dying, but in two pacts in which the couple died of a drugs overdose one member used an analgesic and the other a tricyclic antidepressant. Compared with people who committed suicide alone, people in suicide pacts died more often from poisoning by motor vehicle exhaust fumes, less often by violent means, and more often from poisoning by barbiturates and cyanide, probably because these drugs are obtainable by those in professions related to medicine.

Suicide notes—Suicide notes, a measure of premeditation, were left in 52 pacts. One note was left in 19 pacts, two in 17 pacts, and three or more in 16 pacts. Both partners signed the note in 33 pacts and one partner in 19. In all, 85 people (69%) signed a note,

which is a much higher proportion than the 30-40% of people who commit suicide alone.[10 11]

Stability of pair relationship—The strength of the relationship between the couple could be assessed for 44 of the 62 pairs. In 36 of the 44 pairs the relationship was stable, but in eight it was poor, with evidence of friction, arguments, and previous separations in each case. Thirty five of the 44 pairs were married, and 30 of them were exceptionally close and devoted. This is in contrast with people who commit suicide alone: only two out of 44 marriages were judged stable in one study.[12] All five pairs related by blood were close.

Dominance—Of the married couples, 15 were remembered by witnesses as talking of "dying together" and "not bearing to be parted." This suggests that there was no coercion. The high prevalences of jointly signed suicide notes and poisoning by psychotropic and analgesic drugs suggest the same. These factors make it unlikely that these deaths were homicides followed by suicide, though in eight of the married couples the husband was the dominant partner and may have taken the lead with his wife's cooperation. Studies of survivors of suicide pacts claim that coercion is always present,[13] but since reluctance favours survival the findings cannot be generalised to pacts that prove fatal.

Table 2 Means of dying in pact and solitary suicides in England and Wales, 1988-92. Values are numbers (percentages) of deaths

	ICD-9 code	Pact suicide (n=124)	Solitary suicide (n=19 597)	All suicides (n=19 721)
Self poisoning, solid and liquid substances:	E950	32 (26)	4343 (22)	4375
Analgesics	E950.0	13 (10)	1610 (8)	1623
Barbiturates	E950.1	10 (8)	226 (1)	236
Hypnotics	E950.2	5 (4)	325 (2)	330
Psychotropics	E950.3	2 (2)	120 (1)	122
Cyanide	E950.9	2 (2)	38 (<1)	40
Others		0	2024 (11)	2024
Domestic gases	E951	0	31 (<1)	31
Other gases	E952	84 (68)	5545 (28)	5629
Vehicle exhaust fumes	E952.0*	84 (68)	5290 (27)	5374
Other source of carbon monoxide	E952.1	0	228 (1)	228
Other	E952.8,9	0	27 (<1)	27
Hanging, strangulation, and suffocation	E953	4 (3)	5793 (30)	5797
Submersion	E954	2 (2)	657 (3)	659
Firearms or explosives	E955	0	848 (4)	848
Cutting or piercing	E956	0	387 (2)	387
Jumping	E957	2 (2)	703 (4)	705
Other or unspecified	E958	0	1289 (7)	1289
Late effects	E959	0	1 (<1)	1

ICD-9 = International classification of diseases, ninth revision.[2]
*Twelve coded E952.1 on death certificate were recoded E952.0 after review of inquest record.

Discussion

We will have missed pacts in which the members died more than three days apart, but these are likely to have been few because in all our pacts both members died on the same day. We will have also missed pacts in which the deaths were registered in different registration subdistricts or in which the bodies were not found; their number is unknown. The method may have been biased towards finding pacts between closely related partners. This seems unlikely as studies of suicide show that people who die in suicide pacts had similar relationships to those in our study.[13-15] We studied only pairs of deaths in which both received suicide verdicts so that we could compare our findings with those of Cohen's inquiry into suicide pacts between 1955 and 1958.[1]

Since the 1950s the rate of suicide pacts has fallen by 27%, from 0.83 to 0.61 per million people aged 15 and over each year, and the suicide rate has fallen by 35%, from 148 to 96 per million people each year .[1 5-9] We found that many features of suicide pacts were unchanged. For example, the mean age of those who die in this way and the proportion of married couples and lovers have not changed since the 1950s. In addition, carbon monoxide poisoning continued to be the commonest cause of death, cars replacing kitchen ovens as the source of the gas.

Key messages

- Death in a suicide pact is a rare event but often attracts extensive media attention
- Suicide pacts have not been studied systematically in the United kingdom for over 35 years
- The rate of suicide pacts in England and Wales from 1988-92 was about one each month
- The rate has declined over the past 35 years, despite increasing interest in euthanasia
- People who die in a suicide pact are more likely than people who commit suicide alone to be older, married, female, and of high social class

Conclusion

Suicide pacts account for about 0.6% of all suicides and their incidence seems to be declining. Compared with those committing suicide alone, participants in pacts are more likely to be female, older, married, childless, and of a higher social class.

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