

Attempted Suicide Among the Irish-Born Population in Birmingham

By AGGREY W. BURKE

Summary. The epidemiology of attempted suicide among Irish immigrants in Birmingham is described from data concerning 352 (138 male, 214 female) hospital admissions made during the period 1969 to 1972.

Admissions from the Irish Republic and from Northern Ireland were similarly distributed, but were both grossly over-represented. The average annual rate of admission (222 male, 362 female) was probably higher than the rates in Dublin, Belfast and Edinburgh. The female patient rate (286) was greater than that of Edinburgh, but the male rate (143) was not. Fewer Irish than British admissions gave a history of previous attempted suicide or repeated this attempt. Indices of stress among immigrants were, however, greater. The importance of socio-cultural factors is discussed.

INTRODUCTION

It is hypothesized that there is no difference in the distribution of attempted suicide between immigrants from the Irish Republic and Northern Ireland, natives in Ireland and natives in Britain. Although attempted suicide may be less frequent among natives in Dublin (McCarthy and Walsh, 1965) and Belfast (Lyons and Sharma, 1972; O'Malley, 1972) than among natives of Britain (Kessel, 1965), this may not be true for Irish immigrants in Britain (White, 1971).

In Australia, Irish and native attempted suicide rates have been found to be similar (Krupinski *et al.*, 1966). However, suicide (Whitlock, 1971), violent deaths (Burvill *et al.*, 1973) and alcoholism both in Australia (Krupinski and Stoller, 1965) and in London (Clare, 1972) appear to be more prevalent among immigrants.

SUBJECTS AND METHODS

This study is part of a retrospective investigation of self-poisoning among immigrants in Birmingham. The methods have been described previously (Burke, 1976a, b). During the period 1 January 1969 to 31 December 1972 there were

4,770 general hospital admissions of persons aged 15 years or more resulting from poisoning. Appropriate recording of birthplace occurred in 57 per cent—54 per cent of males (910) and 58 per cent of females (1,785). From the remaining 2,075 casenotes a 10 per cent random sample (204) was selected and studied. The birthplace was determined in 73 per cent (53 male, 95 female), and this was Ireland in 19 (13 per cent total; 11 per cent male, 14 per cent female). Among the 2,695 cases for study the distribution was 14 per cent (male 151, 17 per cent; females 225, 13 per cent) and similar to the random sample.

The case-notes of all but two were found and examined. Twenty-two (13 male, 9 female) had resulted from iatrogenic or accidental causes of poisoning, and these were excluded. Data concerning the remaining 352 were obtained and analysed. Census data indicate that there were 42,975 (22,635 male, 20,340 female) immigrants from the Irish Republic aged 15 years or more. The age distribution is: 15-24, 2,490 male, 2,875 female; 25-44, 10,980 male, 9,790 female; 45-64, 8,170 male, 6,455 female; and 65 and over, 995 male, 1,220 female (Registrar General, 1971a, b). Similar data were not available for Northern Ireland persons.

RESULTS

Attempted suicides from both parts of Ireland are markedly over-represented among admissions for all types of poisoning to Birmingham's hospitals (Table I). There is no

TABLE I
*Distribution of Irish-born among admissions for poisoning and Birmingham's population****

	Poison-ings	(%)	Total population	(%)
Irish Republic	278	(10)*	44,865	(4)***
Northern Ireland	74	(3)*	11,375	(1)***
Other ..	2,343	(87)	958,430	(95)
Totals ..	2,695	(100)	1,014,670	(100)

* Attempted suicide cases only.
** From Registrar General (1971a).
*** $p < .001$.

difference in the distribution of cases from these countries ($\chi^2 = 0.138$). The sex distribution of admissions (Table II) shows that the male-female ratio is 2 : 3 among both Irish groups ($\chi^2 = 1.795$) and is the same in Edinburgh. Most admissions belonged to the Roman Catholic church, but 21 (28 per cent) of those from Northern Ireland and five (2 per cent) of those from the Irish Republic were Protestants.

Among the 258 patients, 65 (25 per cent) were aged 15-24, 149 (58 per cent) married when first admitted to study, 35 (14 per cent) had previously attempted suicide and had been admitted to hospital for that reason, 40 (15 per cent) made repeated attempts during the study, 17 (7 per cent) were addicted to drugs (7 male, 4 female) or alcohol (6 male), and 93 (36 per cent) had been at some time admitted to a mental hospital. The nativity groups are similarly distributed in Table III, and the age and sex distribution found in British populations is confirmed.

A preceding interpersonal dispute was recorded among 159 (45 per cent) of 352 admissions, and of these the majority were aged 15-24. In contrast, there were more older patients among the 73 (21 per cent) who drank alcohol at the attempt, 253 (72 per cent) who swallowed psychotropic tablets, 41 (12 per cent) with a physical disorder, 72 (20 per cent) transferred to a mental hospital and 161 (46 per cent) formally diagnosed at the general hospital. Depressive illness (87, 25 per cent) was diagnosed more frequently than personality disorder (46, 13 per cent) or any other disorder (28, 8 per cent). It is of interest that among the older admissions more of those from Northern Ireland had swallowed psychotropic tablets (51 of 55; cf Irish Republic, 157 of 221, $\chi^2 =$

TABLE II
Age-sex distribution of attempted suicide admissions (1969-1972)

Irish Republic	Male		Female		Total	
	No.	Rate*	No.	Rate	No.	Rate
15-24	14	260	43	645	57	186
25-44	72	304	103	453	175	370
45-64	17	96	25	167	42	126
65+	1	5	3	11	4	8
Total Irish Republic (15+)	104	213	174	369	278	284
Northern Ireland (all ages)	34	253	40	336	74	288
Totals*	138	222	214	362	352	284
Edinburgh's (1970)** ..		177		279		

* Average per 100,000 per annum for all probable cases of self-poisoning during period. Total calculated using Northern Ireland (all ages) and Irish Republic (15+) populations.
** From Kennedy and Kreitman (1973).

TABLE III
Age-sex distribution of attempted suicide patients (1969-1972)

Irish Republic	Male		Female		Total	
	No.	Rate	No.	Rate	No.	Rate
15-24	13	242	37	555	50	164
25-44	42	177	82	301	124	262
45-64	10	57	22	147	32	96
65+	1	5	2	7	3	6
Total Irish Republic (15+)	66	135	143	303	209	213
Northern Ireland (all ages)	23	171	26	218	49	189
Totals	89	143	169	286	258	208
Edinburgh (1970)* ..		155		221		

* From Kennedy and Kreitman (1973).

11.0556, $p < .001$) but fewer drank alcohol (male—N.I. 5, Irish R. 40, $\chi^2 = 4.4138$, $p < .05$; female—N.I. 2, Irish R. 17, $\chi^2 = 0.993$).

DISCUSSION

Retrospective data in Birmingham show no marked differences in the distribution of hospital admission for attempted suicide between persons from the Irish Republic and Northern Ireland, but these groups are grossly over-represented among all such admissions. The clinical characteristics among these Irish attempted suicides are similar to those among native British patients, but not to those found in Dublin. Other evidence indicates that the immigrant rates are higher than those among natives both in Ireland and in Britain. Thus the rate is lower in Edinburgh (Tables II and III). Furthermore, earlier findings were of lower rates in Ireland than in Britain, and a marked increase since then has taken place only in the disturbed areas (O'Malley, 1972), suggesting that native rates there are also lower than ours.

Inaccurate data may have been used. Birthplace had not been appropriately recorded among two-fifths (2,075) of all cases, but was determined in 73 per cent of a 10 per cent sample. Known birthplace was thus probable in 1,515 of these and in 4,210 (88 per cent) of the total sample. It is unlikely that Irish cases among the remaining 560 would significantly

alter the distribution. However, the study did not include cases not admitted to hospital. As Birmingham's general practitioners may not have treated as many cases without referring them to hospital as those in Edinburgh (Kennedy and Kreitman, 1973), comparison of that study with the present one must be made with caution. Denominator accuracy is also questionable. The constant movement between Ireland and Britain, however, involves small numbers of immigrants (Jackson, 1963).

The rate for attempted suicide among immigrants is about 30 per cent greater than that in Edinburgh (Table II). Furthermore, age-specific rates indicate that Irish excess numbers are most marked among those aged 25-44 as well as among younger females. Among patients a higher rate is upheld for females only (Table III). This may be related to the vulnerability to stress to which young immigrant women seem predisposed (Burke, 1976a, b). In the last-mentioned studies other immigrant rates were less than those for native British in Birmingham, but greater than native ones in Asia and the West Indies respectively. The higher Irish rate thus supports the view that ethnic origin and immigrant status are important (Burke, 1976b).

Social selection may be less important than stress (Ødegaard, 1932) in the present study. The age distribution in Dublin (McCarthy and Walsh, 1965) and that of previous suicidal

behaviour there and in Belfast (Lyons and Sharma, 1972) is similar to our findings. In Birmingham, however, more patients were female, married, more attempts followed an interpersonal dispute, and more patients swallowed tablets; but fewer had addiction problems or physical disorder, or were transferred to a psychiatric facility. Furthermore, although the present study confirms clinical characteristics of attempted suicide in Britain (Jacobson and Tribe, 1972) it is noteworthy that fewer immigrants had made previous attempts or repeated this (Buglass and McCulloch, 1970).

Socio-cultural factors may also be important (Burke, 1974). Here, greater urbanization among Northern Ireland patients may predispose to their taking psychotropic tablets rather than analgesics or alcohol, which were preferred by the Irish Republic's more rural population. In Northern Ireland the distribution of Roman Catholics among attempted suicides is less (Lukianowicz, 1972), but here it was greater than expected (Registrar General, 1961). It is most probable that immigrant status leads to inferior living environments. These factors may have contributed to the higher immigrant rates of attempted suicide which we have found.

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