

Role of doctors in the prevention of suicide: the final consultation

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SUMMARY

Background. It is generally assumed that people committing suicide see their doctor shortly before their death, and consequently that enhancing doctors' psychiatric knowledge and interview skills might help prevent some suicides.

Aim. A study was undertaken to determine the nature and timing of final contacts with medical practitioners by people committing suicide.

Method. Adults dying by suicide in Scotland during 1988–89 were identified by the General Register Office for Scotland and their primary care case notes studied.

Results. Within this national sample, medical contact near to the time of the suicidal act was rare, except for those individuals who had a previous psychiatric history.

Conclusion. These data suggest that medical practitioners, particularly those working in primary care, are not failing to detect and intervene in significant numbers of preventable suicides. Consequently, the likelihood of implementing successful suicide prevention strategies based within primary care is open to question. Greater awareness of the risk of eventual suicide in those with a previous history of psychiatric disorder may contribute to any future reduction in suicide rates.

Keywords: suicide; preventive medicine; GP role.

Introduction

AN unexplained and rapid rise in the suicide rate among Scottish men has attracted considerable attention.^{1–3} The work of Barraclough and colleagues has long been held to illustrate a close association between mental illness, specifically depressive disorders, and death by suicide.⁴ Primary care doctors are generally assumed to have conducted a consultation with the individual shortly before the individual's death.⁴ By implication, it is assumed that medical practitioners, and in particular general practitioners, are ineffective in detecting which individuals are at risk and, therefore, unable to initiate appropriate preventive measures. It is also assumed that enhanced psychiatric knowledge and interview skills might result in a greater awareness of and improved management of those at risk of suicide.

As one component of a wider study examining recent developments in the epidemiology of suicide in Scotland, data are presented which detail final medical contacts with subsequent suicide victims. These data highlight the degree to which those who

die by suicide are seen by general practitioners and are recognized as presenting with acknowledged risk factors.

Method

A complete list of all deaths for the years 1988 and 1989, where the cause of death was registered as suicide (*International classification of diseases*, ninth revision, codes E950–959), was obtained from the General Register Office for Scotland. With this information, each of the 15 Scottish health boards were approached with a view to allowing access to the relevant primary care records (general practitioner case notes). Case notes thus obtained were examined by one member of the research team. All available information which related to final contacts with medical services (general practitioner, psychiatric and other specialist services) was recorded. The time period between death and the last consultation with a general practitioner was noted. Similarly, data were extracted for any hospital-based health service consultations.

The record of the final contact was scrutinized with the specific aim of identifying any suggestion of a psychological component to the consultation. A low threshold for the categorization of a consultation as potentially psychiatric in nature was adopted. With the brevity of entries, which are typical of standard general practitioner records, it was not feasible to adopt formal diagnostic criteria.

The statistical package for the social sciences, *SPSSPC*, version four, was used to analyse all data; the Mann Whitney *U* and chi square tests were used, where appropriate.

Results

A total of 1124 deaths of people aged 16 years and over in Scotland during the years 1988 and 1989 were notified to the General Register Office for Scotland as suicides; 806 were men (71.7%), and 318 were women (28.3%). This gives annual suicide rates of 16.4 and 6.0 per 100 000, respectively. There are approximately 3800 general practitioners in Scotland and, assuming an even distribution of deaths by suicide, any single general practitioner will encounter 0.15 suicides per year on average, or one suicide every 6.8 years.

One health board area, Argyll and Clyde, did not give consent to examine general practitioner case notes (no reason given). There were 88 cases identified as originating in the Argyll and Clyde region and these were excluded from the case note study. Case notes from the Lothian region were problematic to collect. Local administrative and storage difficulties at the time of data collection made collation of much of the required information unfeasible. It was, as a consequence, possible to view the notes of only 38 cases (25.3%) identified as occurring in the Lothian region. Of the remaining 13 regions, it was possible to identify 627 sets of case notes, that is, 70.8% of the total cohort.

There were no significant differences between cases in which notes were obtained, compared with those in which notes were unobtained, with regard to age, sex, marital status, social class or chosen method of suicide.

Contact with medical services

For the purposes of this study, if any potentially psychiatric factors were apparent, these were always assumed to be the primary

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reason for consultation. With this assumption, the nature of the final consultation with the general practitioner had been discernably psychiatric in 273 cases (41.1%). For the final hospital consultation, 190 were for psychiatric reasons (28.6%), the remainder being presentations for treatment of a physical complaint.

The timing of final contacts with primary care and hospital based medical services in the 20 weeks prior to the suicide act is shown in Figure 1. In the week preceding the act, 15.8% of people had been seen by a general practitioner, 10.5% seeing a hospital practitioner. In the previous 28 days, 38.3% of people had made contact with a general practitioner, 21.1% seeing a hospital practitioner. Fifty per cent of the total cohort had been seen by a general practitioner within 56 days of committing suicide. Women patients were seen closer to the suicide attempt than men patients by both hospital practitioners and general practitioners (Mann Whitney $U = 32695.5$, $Z = -3.40$, $P < 0.001$ and Mann Whitney $U = 33426.5$, $Z = -4.36$, $P < 0.001$, respectively).

Psychiatric history

Patients with either a confirmed history of, or who had any current evidence suggestive of, a psychiatric disorder (62.4% of the total) were seen closer to the suicide attempt than those without a psychiatric history by both sets of practitioners (Mann Whitney $U = 33780.0$, $Z = -6.79$, $P < 0.001$ for hospital doctors and Mann Whitney $U = 32201.0$, $Z = -9.15$, $P < 0.001$ for general practitioners).

The timing of final general practitioner contacts for those with a positive psychiatric history is shown in Figure 1. For this psychiatric or higher risk group of 415 patients, 25.1% had been seen by a general practitioner in the week preceding the act (15.4% had had contact with a hospital practitioner). In the previ-

ous 28 days, 52.5% had had contact with a general practitioner. Approximately 50% of all such high risk suicide victims had been seen by a medical practitioner (general practitioner or hospital doctor) within the previous 15 days.

Only 22 patients (3.3%) were noted to have expressed suicidal ideas or threats at the time of the final medical consultation. Of these, 19 were patients with a documented psychiatric history.

It was noted that 27 patients (4.1%) had recently experienced significant relationship difficulties leading to separation from a partner or spouse, and that 15 (2.3%) had been bereaved. Ten patients (1.5%) described less severe disharmony within their personal relationships. Of the cohort 28.1% had a documented history of previous deliberate self harm.

Discussion

The methodology employed in this study will inevitably underestimate the true figures for final contacts since not all consultations lead to case note entries. Similarly, the expression of suicidal ideas at the time of the final consultation will not have been recorded in every case. The determination of the presence or absence of current mental state abnormalities is also prone to underestimation. However, these data probably do represent the degree to which such abnormalities were detected and considered by the attending general practitioners. The inability to retrieve all of the identified case notes may have biased the data, although it seems unlikely that this will have exerted a large and systematic effect given the overall similarity in demographic characteristics between those case notes which were and which were not obtained. Despite these reservations, these data represent the most comprehensive and reliable collation of information on a total national population of suicide victims in recent years.

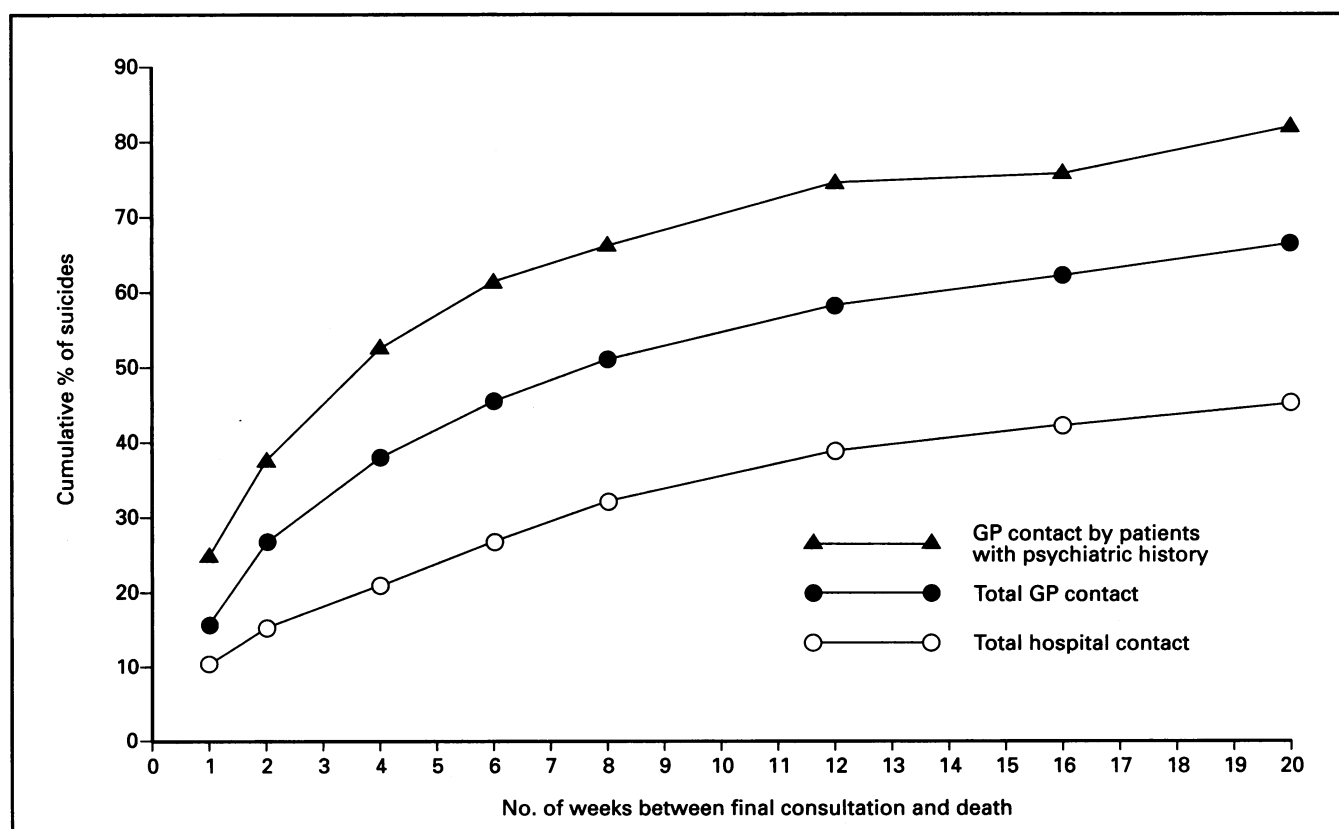


Figure 1. Timing of final contact with general practitioners and hospital medical services made by 665 suicide victims in the 20 weeks before the suicide act, and timing of final contact with general practitioners by 415 people with a psychiatric history.

There has been a significant and sustained rise in the number of young males dying by suicide over the past 20 years, both in Scotland, and in England and Wales.^{5,6} The accuracy of available statistics is generally considered inadequate. As a result of the existing differences between the two legal systems, official suicide statistics for Scotland may reflect the true incidence of suicide more accurately and reliably than the figures for England and Wales. Pounder has presented compelling evidence for the greater validity of Scottish statistics by comparing the respective percentages of deaths in Scotland, and in England and Wales, allocated as either suicide or accidental or undetermined, where the mode of death was hanging, strangulation or suffocation (*International classification of diseases*, ninth revision, code E953).^{7,8} Official figures for 1990 would suggest that suicide accounted for only 84.8% of all such deaths, whether deliberate or accidental, in England and Wales whereas the corresponding Scottish figure was 98.5%. With the exception of sexual asphyxia, which is presumably rare, it seems improbable that death by hanging would not be a suicidal act. It therefore seems less likely that suicide deaths in Scotland are subject to the same degree of misclassification into the accidental or undetermined categories.

These discrepancies in classification may be explained by the differing legal requirements concerning burden of proof. While the English coroner system operates by public enquiry, with proof of intent beyond reasonable doubt necessary for a suicide verdict, Scots law operates through the privately conducted, procurator fiscal enquiry, with a verdict delivered where suicide is considered to be the most reasonable and most probable explanation of death.⁹

The Department of Health has identified the reduction of mortality by suicide as a health gain objective which ought to be considered when assessing the effectiveness of mental health services in England and Wales.¹⁰ Specifically, it has been suggested that overall suicide rates ought to fall by at least 15% by the year 2000, with a reduction in the rate for those suffering from serious mental illness by 33%, from 15% to 10%. There is an implicit assumption that this will be achieved, at least in part, by enhanced detection in primary care of individuals at risk, thereby guiding effective intervention. The findings of the present study suggest that these targets may be more difficult to meet than previously believed.

Whereas Barraclough and colleagues reported that two thirds of suicide victims were seen by a general practitioner within one month of death and 40% within one week,⁴ a more recent study by Diekstra and van Egmond is less optimistic, with only 48% of their cohort of suicides seen during the eight weeks prior to death.¹¹ However, the same authors also reported that 31% had expressed suicidal thoughts during the final consultation.¹¹ The present study suggests that, almost 25 years on from the definitive and often cited United Kingdom study,⁴ medical contact with those who die by suicide is considerably less likely to have taken place close to the date of death. In stark contrast to the findings of Barraclough and colleagues,⁴ it is necessary to look back 20 weeks to locate the final general practitioners contact for two thirds of the cohort.

Where case notes confirm that an individual had not been in recent contact with a general practitioner this has obvious implications for the medical preventability of a suicide. The role of the general practitioner in suicide prevention has previously been reviewed by Diekstra and van Egmond.¹¹ They concluded that suicide was seen infrequently by general practitioners — 0.3 deaths per general practitioner per year — and found that only 3% of deaths were preceded by parasuicidal behaviour in the previous 12 months. The present data suggest that suicide is seen even less frequently by Scottish general practitioners — 0.15

deaths per general practitioner per year (one death every 6.8 years). However, compared with Diekstra and van Egmonds' sample, a larger percentage of the present cohort had documented evidence of previous deliberate self harm (28%). Few of the cohort (3%) were documented to have expressed ideas of self harm in the presence of their general practitioner or hospital physician. It is conceivable that a substantial proportion of the cohort may have presented with somatic complaints, with the attending doctor failing to recognize overt psychiatric distress. If so, then additional training for general practitioners in the detection and management of psychological distress may make a useful contribution to suicide prevention.

Currently available prognostic markers for suicide are inadequate, with little predictive power for individual patients. Previous psychiatric history, medical history, demographic details and knowledge of recent socioeconomic adversity are widely used in attempts to determine suicide potential. The study by Rutz and colleagues¹² is frequently held to illustrate the utility of specific educational efforts to heighten awareness and expand primary care activity with the specific intention of preventing suicides in at risk groups. It is of interest to note that, despite an initial fall in suicide rates in the study population immediately following the educational programme, subsequent longitudinal analysis of this data suggests that the fall may be accounted for by random fluctuations in an already declining suicide rate, with no evidence of a sustained impact in later years.^{13,14}

Perhaps greater optimism for suicide prevention is warranted when one considers victims with a known psychiatric history. Significantly more of this group were seen nearer to the suicide act. If one looks at the numbers making contact with either their general practitioner or a hospital based practitioner, the figures for this high risk subgroup more closely resemble those of Barraclough's cohort.⁴ Indeed, half of all such patients were seen by a physician in the 15 days preceding their suicide. Arguably, it is with these individuals that medical practitioners ought to have greatest optimism for effective suicide prevention.

Our data suggest that the majority of Scottish suicide deaths are not preceded by recent contact with primary care or hospital based physicians. Suicide of a patient is a rare event for the average Scottish general practitioner and the overwhelming majority of patients do not appear to express overt thoughts of self harm at the final consultation. These findings cast some doubt on the likelihood of implementing effective suicide prevention strategies, either in primary care or within mental health services. Careful assessment of suicide potential in those with a previous psychiatric history ought to remain a priority, and may lead to increased effectiveness of suicide prevention strategies in this group of patients.

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