Consultation-liaison scheme for self-poisoned patients in a general hospital

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Summary and conclusions

In a prospective clinical trial 276 self-poisoned patients consecutively admitted to hospital were randomly allocated to medical teams or to psychiatrists for an initial psychiatric assessment and a decision about "disposal." Junior doctors and nurses received instruction in this work. While awaiting the outcome of the trial the randomisation was continued for 13 months and 729 allocations were made altogether. Physicians requested psychiatric opinions for roughly one in five of their patients. In other respects medical teams performed similarly to psychiatrists.

Provided that due attention is given to teaching junior staff and to ensuring that psychiatric treatment and social-work support are available once patients have been assessed, such a consultation-liaison scheme could be adopted in other hospitals. This would help to change unfavourable attitudes towards self-poisoned patients and contribute to the general training of doctors and nurses.

Introduction

Despite the increasing incidence of deliberate self-poisoning, the Department of Health recommends¹ that all such patients should be seen by psychiatrists. This advice is not always followed and has been questioned.²⁻⁵ Management of attempted suicides in general hospitals is of particular educational value because it may help trainee doctors and nurses to realise the importance of their patients' psychological and social problems.⁶ Most self-poisoned patients have taken tablets or medicines prescribed by medical practitioners,^{1 7} and better training in evaluating suicidal risk and patients' psychosocial difficulties might lead doctors to prescribe with greater care.

At Addenbrooke's Hospital we have shown³ that if junior doctors and nurses are suitably taught medical teams can assess suicidal risk and identify patients who require psychiatric treatment or help from social workers, or both. Physicians no longer refer all their self-poisoned patients to psychiatrists, but decide in each case whether specialist advice is necessary. We describe what has been taught and evaluate the effectiveness of the medical-psychiatric consultation and liaison during and after the clinical trial.

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Patients and methods

In a prospective clinical trial³ self-poisoned patients consecutively admitted to old Addenbrooke's Hospital were randomly allocated to medical teams (M) or to psychiatrists (P) for an initial psychiatric assessment and decision about "disposal." All the consultant physicians and consultant psychiatrists who usually treated such patients at Addenbrooke's took part. From 1 June 1975, when entries to the trial ceased, we continued the randomisation and the same assessment procedure while awaiting the outcome.

In July 1975 six beds were designated for cases of self-poisoning in one of the medical wards in new Addenbrooke's Hospital, with PM as the sister in charge. Only about 50% of the patients were subsequently admitted to this ward, 35% going to three other medical wards, and the remainder to surgical wards. In November 1977 the physicians undertook the initial psychiatric assessment of all self-poisoned patients, requesting specialist psychiatric advice or help from the unit social worker when necessary. RG continues to be responsible for the teaching of junior staff, shares consultations with the other psychiatrists, and has an outpatient clinic on the same site to facilitate referral from the wards and accident department.

TEACHING JUNIOR DOCTORS

When they take up their posts preregistration house physicians and medical registrars are instructed in the principles of a psychiatric assessment; how to evaluate a patient's personality; the symptoms and signs of depression; and the importance of always inquiring about suicidal thoughts and intentions. They are asked to interview an informant in each case. It is emphasised, as in the Hill Report,¹ that deliberate self-poisoning should always be excluded before accepting a patient's statement that poisoning was accidental, and that the medical risk does not correlate with the suicidal risk or with the need for further psychiatric treatment. They are told about the subgroups of patients who commonly poison themselves; the possible outcome in terms of suicide and repetition of self-poisoning and the proportion of those admitted who are likely to be offered psychiatric treatment and aftercare; and the local arrangements for transferring patients to psychiatric wards, making outpatient appointments, and obtaining help from social workers. They are asked to see that appointments for clinics and with general practitioners are made before the patients are discharged and within a few days of their leaving hospital; that any medication is given into the care of a relative or friend; and, if possible, that patients come accompanied to clinics or surgeries. House physicians write their clinical findings in the case notes, with a brief formulation. During this study, examples of formulations were given to them in a handout that also included an article on suicide by Sainsbury.⁸

At each consultation, if possible, we (RG and the unit social worker) ask the views of the junior doctor and nursing staff when making our own assessment. Afterwards we discuss the management of the patient with them.

TEACHING THE NURSES

Nurses are encouraged to do more than resuscitate patients—to listen and talk to patients and their relatives; to contribute to the medical teams' assessments; and to make the necessary arrangements for the patients' subsequent treatment and aftercare. During the clinical trial VO'B and RG met nurses on the ward every few weeks to discuss their work—and difficulties—with these patients, to give them some of the facts about suicide and attempted suicide, and to explain the local system for arranging psychiatric treatment and aftercare. Since the summer of 1975 RG and the unit social worker have held one of these meetings weekly, and nurses from any of the wards taking self-poisoned patients may attend.

Results

There were 312 consecutive admissions (276 patients) to the trial. Allowing for withdrawals, 246 patients were admitted to it for the first time. Of these, 126 were allocated to M and 120 to P. During the 13-month post-trial period there were 510 admissions (453 patients). After withdrawals there were 392 patients, of whom 192 were allocated to M and 200 to P. (For each period, only the first admission for a patient in that period was included in the analyses, unless stated otherwise. Figures in parentheses refer to the post-trial period.) This study enabled us to answer some important questions.

ACCIDENTAL OR DELIBERATE SELF-POISONING

Were the medical teams capable of differentiating between accidental and deliberate self-poisoning? Out of the 246 (392) admissions, poisoning was considered accidental in eight (10), uncertain in six (eight), and deliberate in the remainder. Since there were few cases of accidental poisoning and the distribution of the three types of poisoning was the same for M and P, we concluded that the medical teams were capable of making this distinction.

MEDICAL RISK AND SUICIDAL RISK

Did the medical teams base their decisions about further psychiatric treatment on the physical condition of their patients? Table I shows the levels of consciousness of patients after admission to Addenbrooke's and the recommended treatment and aftercare. There was no important difference between M and P. Although the medical risk was low for most patients in both groups, over half of those who were conscious or drowsy only were recommended for psychiatric treatment. A similar number of patients in coma were so referred. Clearly the medical teams appreciated that the medical risk did not correlate with the need for further psychiatric care.

DIAGNOSIS

Could the medical teams make a psychiatric diagnosis? Tables II and III show the illness and personality diagnoses chosen by the two groups of assessors. There is some difference between M and P in the first two categories of both tables. Altogether 58 (97) patients (32 (56) M and 26 (41) P) were found to have no psychiatric disorder

TABLE I—Level of consciousness of self-poisoned patients* and type of treatment recommended for them by medical teams and psychiatrists. (Numbers of post-trial patients in parentheses)

Treatment	Conscious or drowsy	Unconscious but responsive	Unconscious and unresponsive
<i>Medical teams</i>			
Inpatient	20 (36)	3 (5)	6 (4)
Outpatient	49 (65)	5 (6)	1 (4)
Social worker	10 (24)	5 (1)	0 (0)
General practitioner ..	22 (34)	3 (6)	1 (2)
<i>Psychiatrists</i>			
Inpatient	18 (26)	4 (6)	2 (2)
Outpatient	41 (74)	4 (9)	4 (6)
Social worker	9 (24)	1 (3)	0 (2)
General practitioner ..	28 (33)	7 (7)	2 (4)

*Ten patients (one during trial and nine post-trial) were excluded because one of the variables was not recorded.

TABLE II—Illness diagnoses chosen by medical teams and psychiatrists for self-poisoned patients. (Numbers of post-trial patients in parentheses)

Illness diagnosis		Medical teams	Psychiatrists
No psychiatric illness		24 (22)	14 (11)
Situational disturbance		32 (62)	40 (72)
Depressive illness or reaction ..		63 (92)	57 (101)
Mania		0 (0)	1 (0)
Organic psychiatric disorder ..		2 (2)	0 (4)
Schizophrenia		1 (5)	2 (0)
Epilepsy		2 (3)	0 (1)
Other		2 (6)	6 (11)

TABLE III—Personality diagnoses chosen by medical teams and psychiatrists for self-poisoned patients. (Numbers of post-trial patients in parentheses)

Personality diagnosis	Medical teams	Psychiatrists
Normal personality	68 (112)	47 (94)
Personality disorder	36 (61)	56 (86)
Subnormality	2 (2)	1 (2)
Drug dependence	4 (4)	5 (2)
Alcoholism	11 (5)	5 (6)
Other	5 (8)	6 (10)

TABLE IV—Diagnostic categories of self-poisoned patients and types of treatment recommended for them by medical teams and psychiatrists. (Numbers of post-trial patients in parentheses)*

Diagnostic category	Psychiatric treatment	Social-work help	General practitioner
<i>Medical teams</i>			
No psychiatric disorder	24 (35)	9 (17)	23 (30)
Depressive illness or reaction ..	55 (77)	6 (6)	2 (8)
Other psychiatric disorder	6 (10)	0 (2)	1 (4)
<i>Psychiatrists</i>			
No psychiatric disorder	19 (39)	5 (16)	30 (25)
Depressive illness or reaction ..	47 (72)	5 (12)	5 (17)
Other psychiatric disorder	7 (13)	0 (1)	2 (2)

*Six post-trial patients for whom one of the variables was unrecorded are excluded.

TABLE V—Types of treatment recommended for self-poisoned patients and types of treatment received by them. Figures are proportions: number receiving treatment/number recommended for treatment. (Numbers of post-trial patients in parentheses)*

Treatment	Medical teams	Psychiatrists
Inpatient psychiatric	31/29 (40/47)	25/24 (32/34)
Outpatient psychiatric	42/56 (65/75)	37/49 (71/90)
Social worker†	15/15 (/25)	9/10 (/29)
General practitioner‡	11/26 (/42)	16/37 (/44)

*Six post-trial patients for whom "disposal" was not recorded are excluded.

†Post-trial numbers not available for treatment received.

‡Only patients who saw their GP within one month of discharge are included; post-trial numbers not available for treatment received.

—that is, they had a normal personality and an illness diagnosis of either "no psychiatric illness" or "situational disturbance." In interpreting these results it should be realised that the psychiatrists' diagnoses were made by consultants or senior registrars, whereas the medical teams' diagnoses were mostly made by preregistration house physicians and medical registrars with advice from consultant physicians.

Was the diagnosis of any practical value? Table IV shows that the diagnosis influenced the decisions about future psychiatric treatment that were made by the psychiatrists and the medical teams.

CONSULTATION AND LIAISON

How often will physicians ask psychiatrists to see their self-poisoned patients if referral is no longer routine? During the clinical trial the medical teams asked for psychiatric opinions for 17 of their patients (14%), and for 43 (22%) over the next 13 months. The assumption that the medical teams might "play safe" by referring an unnecessary number of their patients to psychiatric wards and clinics proved to be unfounded. They identified similar numbers for further psychiatric treatment as the psychiatrists, both during and after the clinical trial (table I).

Did patients receive the treatment recommended for them? Table V shows that the proportion of patients who received the recommended treatment was similar for M and P. There was also no difference between M and P in the number of patients who received electric convulsion therapy and the various psychotropic drugs. The medical teams might have been expected to select more unsuitable patients for treatment than the psychiatrists, but this did not happen. Table VI shows that the duration of stay in psychiatric wards and drop-out rates at outpatient clinics were similar for M and P, and that patients

TABLE VI—Psychiatric treatment received by both groups of patients as shown by duration of stay in psychiatric wards and number of outpatient attendances. (Numbers of post-trial patients in parentheses)

Days in hospital				Outpatient attendances			
≤7	8–28	≥29	NK	1	2	≥3	NK
<i>Medical teams</i>							
6 (7)	11 (14)	14 (16)	0 (3)	11 (24)	8 (13)	22 (22)	1 (6)
<i>Psychiatrists</i>							
6 (6)	8 (8)	10 (15)	1 (3)	16 (34)	7 (11)	14 (21)	0 (5)

NK = Not known.

who attended the outpatient clinic once only were similarly distributed between the two groups.

Discussion

Our findings support the case^{2,3} for using a more selective approach in the management of deliberate self-poisoning. The medical teams' initial psychiatric assessments proved to be clinically sound during the trial and after it. Making a psychiatric diagnosis helped both groups of assessors to decide about treatment and to identify one in five of the patients as having no demonstrable psychiatric disorder, though most of these patients had taken prescribed tablets or medicines. These findings agree with Kessel's,⁹ although the patients in his series were all assessed by psychiatrists. That preregistration house physicians were able to distinguish the suicidal and the depressed from the psychologically distressed is salutary and not without importance for preventing poisoning in future.

One of the possible disadvantages of a selective approach is that physicians may refer too few patients, a tendency noted for psychiatric referrals generally.¹⁰ Nevertheless, at Addenbrooke's the physicians identified a similar number of self-poisoned patients for psychiatric treatment and help from social workers as the psychiatrists. To date, the psychiatric consultation and referral rates have not changed. Once they have been referred such patients may not receive treatment,¹¹ though we found that patients who were assessed by the medical teams received as much treatment as those who were assessed by the psychiatrists. In theory, the rotation of junior staff may be a disadvantage. In practice, it may be an advantage, since more doctors and nurses are trained in assessment methods and so helped to develop favourable attitudes towards these patients. Our study shows that it is the effectiveness of this training and of the consultation-liaison that matters, and not that psychiatrists should see all self-poisoned patients.

Although the standard of undergraduate medical education in psychiatry has improved,¹² we found it insufficient for our liaison scheme. Junior doctors, coming to this hospital from different medical schools, did not know how to undertake the psychological and social evaluation of self-poisoned patients—though they quickly learnt. This is hardly surprising in view of the official policy.¹ Also it is in the preregistration year, rather than during their undergraduate education, that they mostly learn to handle medical and surgical emergencies. Deliberate self-poisoning is now the commonest clinical problem in general hospitals for which physicians seek specialist psychiatric advice. Similar liaison schemes in other hospitals would enable psychiatrists to contribute more to preregistration training.

At Addenbrooke's we are teaching this subject in greater detail. Student nurses are taught on the wards and during their general training programme. Every intake of medical students is given one session in the subject-based course¹³ on "poisoning," with contributions from a clinical biochemist, paediatrician, physician, and psychiatrist. During their psychiatric attachment each group of students attends a seminar on suicide and attempted suicide. During their time with medical firms, most students can clerk a self-poisoned patient. If adopted elsewhere

such a programme might help to overcome unfavourable attitudes^{12,14,15} towards self-poisoned patients.

Our consultation-liaison scheme has now been fully operational for a year. If similar arrangements were made in other hospitals we think that they would be equally effective. Ten years after the Hill Report¹ it is time that the standing medical advisory committees reviewed the arrangements for treatment and aftercare of self-poisoned patients. A fresh approach that emphasises preventative aspects is needed if we are to control the "epidemic" of self-poisoning.

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ONE HUNDRED YEARS AGO Messrs Savory and Moore have now for some years studied, with great ingenuity and success, the application of gelatine in pharmacy, and have adapted it now to a number of purposes hitherto little thought of, but which offer very great advantages for the purposes of cleanly, exact, and portable medication.

Their first application was the manufacture, now eighteen years ago or more, of small gelatine discs impregnated with suitable small doses of atropine, Calabar extract, etc, for ophthalmic purposes, for Mr Ernest Hart, at St Mary's Hospital. These ophthalmic gelatine discs soon came into general use throughout the world, and have retained their popularity. They are convenient of introduction, painless, portable, and sure in action. Later on, at the suggestion, we believe, of Dr Arthur Sansom, the gelatine discs were adapted for use with the hypodermic syringe. They do not alter, like concentrated solutions: a supply of the needed varieties can very easily be carried in the same case as the syringe and gelatine disc of morphia, atropia, or both, or of ergotin or sclerotinic acid, and is readily dissolved at the moment of use.

Carrying the same idea still further, Messrs Savory and Moore have more recently prepared gelatine lamels in thin sheets, of which each small square contains a dose of such remedies as quinine, morphia, strychnia, calomel, atropia, jalapine, ergotin, etc; so that, in the pocket of an ordinary pocket engagement-book, or inside his waistcoat, a medical man may carry a complete and most efficient medicine-chest. Many physicians carried such little waistcoat-pocket medicine-wallets in their continental rambles; and we can answer for having found one, which we carried with us in the autumn, very useful, both to our companions and to others. That they will prove extremely popular to travellers, tourists, emigrants, and various country folk, not having a druggist's shop next door, is self-evident. They may save a country doctor often a good deal of trouble; and we are not without hope that, by encouraging the use of small doses of active principles, they may do something to advance exactness and simplicity in prescribing. (*British Medical Journal*, 1878.)