Irregular discharge against medical advice from the accident and emergency department — a cause for concern

A. G. PENNYCOOK, G. McNAUGHTON, F. HOGG

Department of Accident and Emergency Medicine, Royal Infirmary, Castle Street, Glasgow G4 OSF

SUMMARY

An irregular discharge (ID) from the A&E department is an undesirable, but relatively common occurrence. A prospective study was undertaken to quantify the size of the problem and by arranging a subsequent review of the patient, to determine the clinical outcome.

Over a 3-month period, 139 patients (0.73% of attendances) took their own discharge against medical advice. A further 566 patients (3.03% of attendances) left prematurely prior to any medical assessment (DNW).

Attendees irregularly discharged, often with serious untreated conditions. A high proportion were intoxicated with alcohol (65.5%). Attempted follow up proved difficult and incomplete. Patients with serious conditions appeared to return spontaneously for further care. Methods of minimizing the numbers of patients who take an ID or DNW are discussed.

Taken together, the numbers of these attendees leaving prematurely, can be used as a valid performance indicator of the delivery of health care in the A&E department.

INTRODUCTION

It is an unsatisfactory feature of patients attending an A&E department, that a proportion will leave prior to their treatment being completed and take an ID. Another group will leave prior to any medical assessment and fall into the category of 'did not wait to be seen' (DNW). Previous studies (Gibson *et al.*, 1978) suggest

that up to 3% of all attenders may fall into these categories. Little is known about their clinical outcome. Patients who take an ID may prejudice their clinical care leading to an increased morbidity and risk of mortality. Non-compliant patient behaviour is increasingly being recognized as a real health care problem (Ochitill *et al.*, 1985). It has even been suggested that each ID represents a failure of clinical care (Selbst, 1986).

In the authors' experience patients irregularly discharge frequently with potentially serious conditions from the A&E department at the Royal Infirmary, Glasgow.

Therefore a prospective study was undertaken to establish the size of the problem, to attempt to discover the clinical outcome and to arrange appropriate follow up, hopefully optimizing the care of this difficult group of patients.

MATERIALS AND METHODS

Over a 3-month period a record was kept of all patients who irregularly discharged from the A&E department and short stay wards at the Royal Infirmary, Glasgow. The following details were collected:

- (1) Personal Details — including age, address, name of general practitioner (GP);
- (2) Date and time of attendance and time of ID;
- (3) Diagnosis;
- (4) Treatment given prior to discharge;
- (5) Consumption of alcohol or other drugs prior to attendance.

Follow up of these patients was then attempted within 24 h by:

- (1) Direct contact with the patient;
- (2) Contact through their GP;
- (3) Contact through other agencies.

Where possible clinical outcome, following ID was determined. The numbers of patients who did not wait to be seen (DNW) i.e. left prior to assessment by a doctor were also recorded.

RESULTS

During the study period, 139 patients (0.73% of total attendances) took an irregular discharge (ID), 116 were from the A&E department and 23 from the short stay wards. A further 566 patients (3.03% of total attendances) left prior to any medical assessment (DNW).

Overall 3.76% of patients left the A&E department prematurely. Only the ID group were subjected to further analysis. In 24 cases (17.2%), inadequate personal details rendered subsequent follow up impracticable. There were 104 male patients (74.8%) and 35 female patients.

The ages of the ID group are shown in Fig. 1 whilst the times of patient arrival and premature departure are shown in Fig. 2. The numbers of irregular discharges were evenly spread throughout the days of the week, with a slight bias for Friday

Fig. 1. Age distribution of ID.

and Saturdays. Eighty-four patients (60.4%) received no treatment prior to leaving. The commonest procedure carried out was suturing in 19 patients (13.7%). Gastric lavage was performed on three patients and five received intravenous naloxone. The remainder received a miscellany of other treatments e.g. wound dressings, analgesics and antibiotics. Alcohol was felt to be a significant factor in 91 patients

Fig. 2. Times of arrival and ID, ■ = arrival time and ▨ = ID time.

(65.5%) whilst 13 patients were clearly under the influence of other drugs e.g. intravenous heroin. Ten patients had overdosed orally, leaving only 25 patients (17.9%) who were felt to be free of drugs and likely to have a clear, lucid sensorium at the time of irregular discharge. Overall 26 of the patients were known to be intravenous drug abusers.

Table 1 shows the presumed diagnosis of the ID group, the commonest traumatic diagnosis being a head injury, closely followed by a penetrating stab wound. The commonest medical diagnosis was that of self-poisoning (10.8%).

The follow up methods used and the subsequent outcomes of attempted review are shown in Table 2.

Eighteen patients (12.9%) re-attended spontaneously and their diagnosis and outcome are shown in Table 3. A small group of six patients had no attempted follow up, despite adequate personal details being initially recorded. Their clinical outcome is unknown.

No fatalities were known to have occurred in the ID group but one patient from the DNW group was admitted to another hospital, the same day as her initial attendance and subsequently died.

Table 1. Presumed diagnoses of the ID group.

(a) Trauma (54.7%)	(1) Head Injuries including 2 proven skull fractures.	43 (30.9%)
	(2) Penetrating stab wounds to trunk including — 1 haemopneumothorax 1 pneumothorax 1 haemothorax 1 perforated colon	12 (8.6%)
	(3) Facial injuries including 3 facial fractures and 2 incised wounds requiring suture	7 (5%)
	(4) Miscellany of conditions self inflicted wounds e.g. to wrist Fractures ribs Hand lacerations requiring suture Dislocated shoulder	14 (10%)
(b) Medical (33.8%)	(1) Self-poisonings	15 (10.8%)
	(2) Accidental overdosage of heroin	5 (3.6%)
	(3) Alcohol intoxication alone	16 (11.5%)
	(4) Ischaemic chest pain including one patient with a nodal tachycardia and heart failure	5 (3.5%)
	(5) Deep venous thrombosis on venogram	1
	(6) Post seizure	3
	(7) Alcohol withdrawal syndrome	2
(c) Surgical (5%)	(1) Abdominal pain of unknown origin	1
	(2) Infection — 3 cellulitis & 3 abscesses all related to IV drug abuse.	6 (4.3%)
(d) Unknown		9 (6.5%)

Table 2. Methods of follow up and subsequent outcome.

Method of patient contact	Outcome of contact
16 patients were telephoned directly by authors	10 refused to reattend 2 were admitted 2 were given clinic OPD 2 were not at home
2 patients were contacted by letter offering follow up	Both patients failed to reattend for review
64 patients GP were written to and asked to follow up patient and reply to A&E on a standard form	5 GPs replied 2 patients had been seen and were well 2 patients were referred back to A&E clinic 1 GP had tried to attend patient but failed
24 patients were unable to be contacted due to a lack of personal details	Unknown
5 'hostels' were contacted by telephone	4 patients refused to re-attend 1 patient had not been seen by staff
3 patients had been given a clinic OPD at time of irregular discharge	All 3 attended the clinics as arranged
1 patient was discovered to have been admitted to another hospital with non-specific abdominal pain	{family telephoned to complain}
18 patients returned to the A&E department spontaneously	13 were admitted 3 took a further ID (2 after admission) 3 were reviewed and discharged back to their GP 1 was given a clinic OPD

DISCUSSION

Disturbingly, this study shows that significant numbers of patients irregularly discharge against medical advice (0.73 of attendances) from our A&E Department. A further larger group (3.03%), fell into the category of 'did not wait to be seen' (DNW) i.e. they left before any medical assessment took place. Taken together, these two groups form a sizeable minority of attenders who receive suboptimal care and attention. Little has been written about this difficult to manage group of patients in the U.K. but studies in the U.S.A. have found that a small, but relatively consistent number of patients leave the emergency room prematurely (Wartman *et al.*, 1984). In comparison, Weissberg *et al.* (1986) found that only 1.4% of patients left prematurely, compared to 3.76% in our study.

Neither the sex of (74.8% were males), nor the age distribution (Fig. 1) of the irregular discharges were remarkable, the commonest decade being the third (41.2%). However, all ages including the elderly do take their own discharge and the elderly may subsequently, be especially at risk (10% >60 years).

The times of arrival and ID (Fig. 2) follow, the normal pattern of workload in

Table 3. Diagnoses & outcome of patients who returned spontaneously.

Initial diagnosis	Diagnosis on review	Outcome
Stab wounds to chest — haemothorax	Haemopneumothorax & haemopericardium	Cardiothoracic admission & surgery
Stab wounds to chest & abdomen	Subphrenic collection & splenic injury	Admission & laparotomy
35 Stab wounds to back & buttocks	Infected wounds — no visceral injury	Refused admission & took ID
Stab wounds to chest	Pneumoperitoneum & colonic perforation	Admission & laparotomy
Multiple stab wounds to trunk & limbs	No apparent visceral injury	Admitted & observed took further ID
Temporal bone fracture & fractured left orbit	Marked proctosis of eye	Admission & emergency decompression of orbit
Head injury & facial wounds	No fracture	Wounds sutured & admitted for observation
Head & facial injury	Mandibular fracture	Admitted for operation
Head injury	Headaches & nausea	Admitted for observation
Head injury & alcohol intoxication	Clinically well	Discharged with alcohol advice
Head injury	Postconcussional syndrome	Admitted for observation
Ruptured ulnar collateral ligament of thumb	Unstable	Admitted for surgical repair
Fracture ribs	No internal injury	Analgesics — GP review
Severe chest pain	Crescendo angina	Admitted for investigation
Self poisoning with benzodiazepines	Clinically well, not suicidal	GP review
Alcohol intoxication	Acute withdrawal	Refused — took ID
Alcoholic seizure	Further seizure	Admitted medically
Fractured wrist — arm swollen	Circulatory problem	Required plaster splitting

A&E, most occurring in the late afternoon and evening. ID occurred on all days of the week with a preponderance on Friday and Saturdays nights. This is perhaps consistent with the high numbers who were felt to be 'intoxicated' with alcohol (65.5%) or other drugs.

More worrying perhaps, is the 25 patients who left prematurely from the A&E department who were not felt to be intoxicated and the 23 who left the short stay wards the next day against medical advice. These patients should all have been able to be reasoned with. Conversely, it is not fully appreciated that patients often attend reluctantly, brought by relatives or bystanders, perhaps when their

conscious level was depressed (e.g. post-seizure or alcohol intoxication). They are perfectly entitled at any stage to decide that they wish to end the consultation. Staff must understand that patients may have perfectly valid reasons for not complying with medical advice e.g. family or business commitments and it is then necessary to treat the patient as effectively as possible as an out-patient. Clearly other factors such as an abnormal fear of hospitals, psychiatric problems, the need for alcohol or other drugs (e.g. inability to comply with hospital no smoking zones) and other psycho-social problems (Wartman *et al.*, 1984; Weissberg *et al.*, 1986) may play an active role.

Equally, it is probable that an unfriendly welcome to the A&E unit, unsatisfactory or non-existent triage, rude medical and nursing staff and above all, a prolonged waiting time are likely to increase the numbers of irregular dischargers (Selbst, 1986). All these factors may contribute to an apparently unreasonable, angry patient who may be covertly encouraged to leave by a member of staff.

Patients with a wide variety of diagnoses irregularly discharged (Table 1), However, it is of concern that large numbers of patients with overdoses (10.8%), and others who clearly were emotionally or mentally disturbed, left prematurely. This indicates the possibility of staff attitudes contributing to the patient leaving, emphasizing the need to treat this group with great sensitivity to their psychological, as well as physical needs.

Follow up (Table 2) of these patients proved difficult, time consuming and overall, was inadequate.

Direct contact with the patient by either letter or telephone, did not lead to satisfactory follow up. Patients who were contacted tended to say that they were 'well' and refused to re-attend for review.

Writing to the patients GP, disappointingly, also produced little tangible result, only five GPs replied. It may be that the GP either did not perceive the follow up of these patients to be their problem, or that follow up contact was made by the GP who then did not communicate back because there was no clinical need. Equally, it may be that the GP did not reply to the authors due to lack of time, or for other reasons.

More use could have been made of the telephone (Table 2), but direct contact with a particular GP, especially out of hours and with the widespread use of deputizing services, can be difficult.

Contact through other agencies was limited, though telephoning a 'homeless persons' hostel did prove useful, ensuring that the most socially disadvantaged had at least returned 'home' even if they did not want further medical attention. The police and social services were not enlisted to contact the patient except in the most exceptional circumstances (e.g. likely threat to life or irregular discharge of a child). However formal legal intervention is mandatory where a case of child abuse is suspected (Selbst, 1986).

Many of the patients who took premature discharge with the more serious conditions tended to return spontaneously for further treatment (Table 3). This may be because they 'sober up' and realize the extent of their illness or injury or are persuaded to return by a friend or relative.

None of this group of patients died and hence, despite their initial non-compliance, appear to have had a relatively good outcome. However this cannot

be presumed to be generally the case. Patients often irregularly discharged with a potentially serious condition and despite our attempted follow-up many of their clinical outcomes remain unknown. Tragically, one patient who left prior to medical assessment (DNW) of a presumed minor head injury, whilst accompanied by her husband, was subsequently admitted to another hospital with an intracranial haemorrhage and died less than 24 h after her initial ID.

Positive measures are required to minimize the numbers of patients leaving prior to their medical care being completed. Firstly, prompt, friendly and sensitive nurse triage, with a written record on the A&E card, should be undertaken of all patients entering the A&E department. This will give the patient the feeling of rapid initial attention and will allow an adequate explanation of the likely waiting time and the reasons for any such wait. Difficult patients, can be identified at this early stage and their fears allayed. Secondly, waiting times must be kept to a minimum. A prolonged waiting time is a potent force for creating patient dissatisfaction and likely to contribute to the numbers of patients leaving prematurely, in direct proportion to the length of time spent waiting to see a doctor. Any attempt at early departure, should be courteously and sympathetically met, with a reasoned explanation, preferable by a member of the medical staff, of the importance of completing treatment.

Finally, a small group of patients will still, despite the best of care and attention, leave prematurely against medical advice. This is a part of the work of the A&E department that has been suggested to be especially at high risk medicolegally (Selbst, 1986). However, it must be emphasized, that as long as the patient is mentally capable, intoxication with alcohol or other drugs not being an excuse in law, then a patient is ultimately responsible for his own actions and any subsequent misadventure. Despite this, documentation of the irregular dischargers attendance must be meticulous. An irregular discharge form, though not strictly required, should be signed and witnessed if the patient will cooperate, to minimize any subsequent medicolegal problems for the attending doctor and A&E department.

In cases of serious illness or injury, direct contact should be made with these patients and follow-up attempted by the A&E team. Failing this, the patients GP should be contacted ideally by telephone, so that medical care can be initiated in the community. Good practice also dictates that as a minimum the GP should receive a full discharge summary just as if the patient had completed their treatment.

In following the above guidelines, the medical care of this group of patients can be optimized and any subsequent medicolegal implications minimized. Taken together, the numbers of irregular dischargers and patients who do not wait to be seen, can be reasonably used as a performance indicator in the A&E department, rising numbers perhaps suggesting problems in the delivery of health care that need to be addressed.

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