

Use and misuse of an accident and emergency department in the East End of London¹

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Summary: A study was made of all 587 new patients attending an accident and emergency department in the East End of London during one week. Two hundred and twenty-six (39%) cases were not accidents or emergencies; of these, 67% were self-referrals who had not previously seen their general practitioner (GP) and 21% were self-referrals who had previously seen their GP. The four main reasons that these self-referred patients had for attending were that they thought their condition needed immediate attention; they were insufficiently organized to see their GP; they were not registered with a GP; or they wanted a second opinion. Twenty-eight (12%) of the cases which were not accidents or emergencies were referred by a GP.

Sixty-nine (12%) of all cases were not registered with a GP. The frequency of cases who were not accidents or emergencies was significantly higher in those not registered than in those registered ($0.01 > P > 0.001$). Nineteen (3%) patients were living rough or in hostels. Little abuse of the ambulance service was found.

Introduction

The most important function of an accident and emergency (A & E) department is to provide urgent treatment for those in need of skilled hospital care at any time of day or night (Central Health Services Council 1962). Previous reports have indicated that many patients seen are not accidents or emergencies (Fry 1960, Central Health Service Council 1962, Rutherford 1971). We have studied the reasons that such patients had for attending, because a reduction in their numbers would increase the efficiency of A & E departments.

The London Hospital is a teaching hospital within the Tower Hamlets Health District. The District is in the East End of Inner London with a population of approximately 150 000. There is a high level of social deprivation (Royal College of General Practitioners Working Party 1981) including a large single homeless population, many of whom are vagrant alcoholics alternating between living rough and in hostels; there are estimated to be approximately 2000 hostel beds in the district (Social Services and Community Facilities 1977). The usage of the department by the single homeless was also investigated.

Patients and methods

This study was carried out during one week in January 1978. Information was extracted from casualty cards. The casualty officers also completed a questionnaire and recorded whether they considered the case was an accident, an emergency or not an accident or emergency, and the reasons for attendance. All trauma cases, however minor, were classified as accidents. Cases classified as emergencies also included the cases in which the symptoms suggested an acute medical or surgical emergency. During the week there were 607 new attendances; 16 did

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not wait to be seen and 4 questionnaires were mislaid. The characteristics of 587 patients were therefore analysed. Statistical analysis was by chi-square test with Yates's correction, and $P < 0.01$ was taken as significant.

Results

Of the 587 patients analysed, 20% were aged 15 years or younger; 24% were between 16 and 24; 27% between 25 and 44; 20% between 45 and 64; and 9% were over 65. Fifty-five percent of the patients were male and 37% were married.

Home address: 58% lived in Tower Hamlets. 69% lived in Inner London, 22% in Outer London, 7.5% in the Home Counties and 1.5% lived outside London or the Home Counties.

Registration with a GP: 69 (12%) were not registered with a GP. Of these cases, 39 (56.5%) were not accidents or emergencies. The frequency of patients who were not accidents or emergencies was greater amongst those not registered with a GP (39 of 69) than amongst those registered with a GP (187 of 815) ($0.01 > P > 0.001$).

Methods of referral: 497 (85%) of the patients were self-referrals, 78 (13%) were referred with a letter by a GP and 12 (2%) by another hospital.

Classification of cases: 207 (35%) were classified as accidents; 154 (26%) as emergencies; and 226 (39%) as not an accident or emergency. Of the accident and emergency cases, 311 (86%) were self-referrals.

Characteristics of cases who were not an accident or emergency: These 226 patients were subdivided into three groups. The first group (67% of these cases) were self-referrals who had not seen their GP with the presenting complaint (Table 1); the second group (21%) were self-referrals who had previously seen their GP with the presenting complaint (Table 2); the third group (12%) were referred by a GP (Table 3).

Table 1. Self-referred cases who were not accidents or emergencies and had not seen a GP

Reasons for A & E department attendance	No. (%)
Thought condition needed immediate attention	54 (36)
Insufficiently organized to see GP	41 (27)
Not registered with a GP	22 (14.5)
Considered he/she under hospital care	12 (8)
Preferred to be seen at hospital with this condition	10 (6.5)
Tried but failed to contact GP	9 (6)
Visitor to area	3 (2)
	151 (100)

Table 2. Self-referred cases who were not accidents or emergencies and who had previously seen their GP with the presenting complaint

Reasons for A & E department attendance	No. (%)
Wanted a second opinion	22 (47)
Thought condition needed immediate attention	11 (23)
GP told patient to go to A & E department if further trouble	5 (11)
Insufficiently organized to see GP again	5 (11)
Had outpatient appointment but wanted earlier opinion	3 (6)
Tried but failed to contact GP	1 (2)
	47 (100)

Table 3. GPs' reasons for referring cases who were not accidents or emergencies

Reason for referral	No. (%)
Another opinion	14 (50)
Confirmation of diagnosis	9 (32)
Request for referral to outpatients	3 (11)
Request to be seen before next outpatients	2 (7)
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	28 (100)

Ambulance cases: Of the 70 (12%) patients who arrived by ambulance, 51 were self-referrals. The frequency of accident and emergency cases was greater amongst ambulance cases (60 of 70) than amongst non-ambulance cases (301 of 517) ($P < 0.001$). The frequency of admissions was greater amongst ambulance cases (32 of 70) than amongst non-ambulance cases (62 of 517) ($P < 0.001$).

Hostel dwellers and those living rough: Twelve patients were hostel dwellers and 7 were living rough. All were male. All were self-referrals. Only 6 of the hostel dwellers and none of those living rough were registered with a GP. Of the patients examined from Tower Hamlets, 3.4% lived in hostels whereas only 1.4% of the population of Tower Hamlets live in hostels (Social Services and Community Facilities 1977). Ten (53%) of this group were not accidents or emergencies.

Discussion

The most frequent reason for attending that was given by patients who were not accidents or emergencies was they thought that their condition needed immediate attention. Ideally these patients would not be seen at an A & E department, but it is probably unrealistic to expect patients always to know whether or not they are acutely ill. Increased health education might decrease the number of these patients (Expenditure Committee 1974). Patients who are insufficiently organized to see their GP present a difficult problem. The casualty officers, sisters and clerks try to explain to these patients how the department should be used but some patients are very resistant to these explanations. It is often easier and quicker for doctors and nurses just to deal with the clinical problems rather than become involved in argument. Some patients who were not accidents or emergencies came to the department because they were old patients of the hospital, because they did not want to see their GP with their particular condition or because they wanted to be seen before their booked outpatient appointment. The open-door policy is essential so that urgent cases can be dealt with promptly, but this allows other patients the possibility of direct access to the hospital.

Patients who were not registered with a GP attended more frequently than registered patients with conditions that were not accidents or emergencies, suggesting that they used the A & E department as an alternative to general practice. Efforts are being made to reduce their numbers by showing them a list of local GPs and encouraging them to register.

Some GPs, by referring cases which were not accidents or emergencies, used the department as a convenient substitute for outpatients. This problem might be overcome if GPs were regularly provided with a list of waiting times for outpatients. It has been suggested that some patients in Inner London may have difficulty in contacting their GP (London Health Planning Consortium 1981, Royal College of General Practitioners Working Party 1981) and indeed this was the reason that some patients gave for attending this department. Patients who were not accidents or emergencies also attended because they said they had been told to do so by their GP if they had further trouble. The LHPC (1981) has recommended measures to improve the standard of general practice. These include incentives for registering patients, more group practices, better premises and younger doctors. If implemented, they should result in a fall in inappropriate attenders of A & E departments.

Nearly half of the cases who were not accidents or emergencies, but had previously seen

their GP, wanted a second opinion. This is a reduplication of medical resources, and further study is required to establish why such patients attend.

It is recognized that A & E departments can deal with all accidents, whether minor or major (Rutherford 1971), and in this series all trauma cases were classified as accidents. There are no absolute criteria for the definition of an emergency or for whether a patient's symptoms justify an urgent opinion, but when we reviewed all the cases we found that there was good agreement amongst the casualty officers about the types of cases they classified as emergencies.

Forty-two percent of the patients lived outside Tower Hamlets. Some of these worked locally but others travelled specifically to come to the London Hospital. It is recognized that teaching hospitals may attract referrals from outside their area, both from GPs and other hospitals, because of their reputation and specialized departments. In other areas, tourists and visitors may result in extra attendances. The London Hospital is not situated in a tourist area and only 6 non-accident and emergency cases and 3 accident and emergency cases were visitors; none of these patients had seen a GP before attendance.

The staff had the impression that more than 19 of the patients seen during the week were hostel dwellers or living rough. In these patients the presenting complaint was often superimposed on chronic alcoholism and they were difficult to manage, spent a long time in the department and required a great deal of nursing and medical attention. Therefore, although the numbers were statistically small, a false impression of large numbers was created. Few of these patients were registered with GPs, over half were not accidents or emergencies and the number of hostel dwellers seen was over twice that expected. There is a need for increased primary care for this difficult group outside an A & E department. This could possibly be met in hostels or missions.

Abuse of the ambulance service has previously been reported by Morris & Cross (1980) in 51.7% of all cases and by Mestitz (1957) in 40% of medical cases. However we found little abuse, and the frequency of accident and emergency cases and of admission was significantly higher in ambulance cases than in non-ambulance cases.

The reasons for attending that are given by patients who are not accidents and emergencies illustrate the difficulties which must be overcome if their numbers are to be reduced. Misuse of the A & E department could often be ascribed directly to the patients; however, inadequacies in hospital and general practice also contributed. Reduction of these numbers may result from increasing patient education, increasing the number of patients registered with GPs, improved general practice, and improved communication between general practice and hospital outpatients.

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References

- Central Health Services Council (1962) Accident and Emergency Services. HMSO, London
 Expenditure Committee (1974) Fourth Report, Session 1973-74. Accident and Emergency Services. HMSO, London
 Fry L (1960) *Lancet* i, 163-166
 London Health Planning Consortium (1981) Study Group on Primary Health Care in Inner London. LHPC, London
 Mestitz P (1957) *British Medical Journal* ii, 1108-1109
 Morris D L & Cross A B (1980) *British Medical Journal* 281, 212-213
 Royal College of General Practitioners Working Party (1981) A Survey of Primary Care in London. RCGP, London
 Rutherford W H (1971) *Ulster Medical Journal* 41, 10-16
 Social Services and Community Facilities (1977) London Borough of Tower Hamlets