

PRACTICE OBSERVED

Practice Research

Use of accident and emergency department by patients from one general practice

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Evidence from the Platt report¹ on the accident and emergency services in 1962 showed that a high proportion of new patients attending accident departments were young men aged 16-29. This was supported by later studies,² and then the Court report³ on the child health services in 1976 drew attention to accidental injury in children.

A rising incidence of children attending accident departments has since been reported in studies from children's hospitals⁴ and in statistics on work load from accident and emergency departments.⁵ It is estimated that one in every three patients seen at accident and emergency departments will be under 16 years of age and that each year 20% of the children in Britain might be expected to attend hospital after accidents. This trend, however, has not been reflected in reports on the accident services from general practice.⁶

I reviewed the patients from an urban practice in the north east of England who attended an accident and emergency department during one year to find out their age, sex, the pattern of injury, and how they were managed. Patients whose accidents and injuries were treated in the practice without hospital referral were not included.

Methods

The practice has 2821 patients and is in a group practice of five doctors serving an urban population of 17 000 patients. The practice is part of a primary health care team with an appointment system and is confined to an area of about five square miles with a district hospital on its immediate western boundary. The medical centre and the hospital are easily accessible to all patients. The accident and emer-

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gency department that I studied is part of a new district general hospital. Copy-records of each patient's details, treatment, and management are routinely issued to general practitioners. The copy-records of all patients from the practice who were seen in the accident department were collected between 1 June 1980 and 31 May 1981, and the information analysed.

Results

Three hundred and ninety-three practice patients were seen as new patients at the hospital accident department during the year. Seven patients were seen on two separate occasions with different problems, and four patients were seen at accident departments at other hospitals while away from home and are included here. Three hundred and seventy patients were self-referred or were taken directly to the accident department and only 23 (6%) were referred by the practice. The age and sex of the 393 patients are shown in fig. 1. There were more male patients in the younger age groups 0-15 and 16-29 years, and more female patients in the age groups 30-59 and 60+. Table 1 gives the number of patients by age who attended the accident department and the percentage of the practice population that they represented: 17% of patients in the age group 0-15 years attended against 12% of patients in the age group 16-60+. Fig. 2 shows the distribution by age and sex of the patients in the practice compared with the figures for England and Wales.⁷ In the practice there were more young people under 16 and fewer people over 60 than in England and Wales. If the attendance rates reported in this survey had affected the population at large then the attendance in the 0-15 age group (42% in fig. 1) would have been 30% in 3 of all patients who attended the accident department would have been under 16.

In fig. 3 the types of accidents and injuries, expressed per 1000 patients a year, are compared for the age groups 0-15 and 16-60+. Most patients attended with accidents and injuries, but acute illness was notable, especially in adults. Soft tissue injuries were common—lacerations and abrasions in patients aged 0-15 and sprains and strains in those 16-60+. Fractures and head injury occurred frequently, as did animal bites, especially dog bites. Eight children were bitten seriously enough to be taken to hospital. Accidental ingestion of medicine was common in patients aged 0-15, often in those under 5,

attendance at the accident department closely approximated to the incidence of accidental injury.

It was disappointing that so few patients—6%—reported to the practice before going to hospital, especially when so many of the problems—67%—were considered to be minor. There is always a doctor or practice nurse at the surgery to see a patient in an emergency, but this service provided by the general practitioner is not being used as much as it could be. Factors that militate against more patients being seen first at the practice may be the apparent inflexibility of the appointment system, the patient's habit of taking "accidents to the hospital and illness to the doctor,"⁸ and the accessibility of the hospital. Statistics are now being kept of the number of accidents being dealt with in the practice and the number going to the hospital.

Accidents in children are a major cause of childhood morbidity, their causes are multifactorial,⁹ and their prevention has a high medical priority.¹⁰ Attention should be focused in very young children on avoiding injury at home—especially preventing accidental ingestion of medicine by providing child-proof containers. The large numbers of injuries occurring in school-children as reported in this study might be substantially reduced if attention was drawn to the fact that they are a group "at risk" and that care is required in providing for their needs, as is being shown in the National Play it Safe campaign.

When the Platt report on accident services was published in 1962 a high proportion of patients attending accident departments were young adults aged 15-29, but it now seems that most patients are under 16 years of age, particularly school-children aged 5-15.

Conclusions

Three hundred and ninety-three patients from an urban practice in the north east of England were seen as new patients at the accident and emergency department of a district general hospital in one year. Forty-two per cent were under the age of 16 and attendance at the accident department by young patients (0-15 years) at a rate of 171 per 1000 patients a year was definitely

more common than by adults (16-60+) years at a rate of 122 per 1000 patients per year. Whereas 10 years ago a high proportion of patients seen at accident departments were young adults aged 16-29 years it now seems likely that those most at risk from accidents and injuries are under the age of 16.

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OF THE OPHTHALMIA, OR INFLAMMATION OF THE EYES.

THIS diæsis may be occasioned by external injuries, as blows, burns, bruises, and the like. It may likewise proceed from dust, quick-lime, or other buffaloes, getting into the eyes. It is often caused by the foggage of ciliary evaporation; as the healing of old sores, drying up of ulcers, the foggage of greasy morning sweats, or of the sweating of the feet, &c. Long exposure to the night-air, especially in cold northern winds, or whatever suddenly checks the perspiration, especially after the body has been much heated, is very apt to cause an inflammation of the eyes. Viewing snow or other white bodies for a long time, or looking idly at the sun, a clear fire, or any bright object, will likewise occasion this malady. A sudden transition from darkness to very bright light will often have the same effect.

OF THE QUINSEY, OR INFLAMMATION OF THE THROAT.

THIS diæsis is very common in Britain, and is frequently attended with great danger. It prevails in the winter and spring, and is most fatal to young people of a sanguine temperament.

CAUSES.—In general it proceeds from the same causes as other inflammatory disorders, viz. an obstructed perspiration, or whatever heats or inflames the blood. An inflammation of the throat is often occasioned by emitting lumps of fat of the covering usually worn about the neck, by drinking cold liquor when the body is warm, by riding or walking against a cold northerly wind, or any thing that greatly cools the throat and parts adjacent. It may likewise proceed from the neglect of putting, drying, or any other evacuation.

SINGING, speaking loud and long, or whatever frays the throat, may likewise cause an inflammation of that organ. I have often known the quincy prove fatal to jovial companions, who, after sitting long in a warm room, drinking hot liquors, and singing with vehemence, were so imprudent as to go abroad in the cold night-air. Sitting with wet feet, or keeping on wet clothes, are very apt to occasion this malady. It is likewise frequently occasioned by continuing long in a moist place, sitting near an open window, sleeping in a damp bed, sitting in a room that has been newly plastered, &c. I know people who never fail to have a fore-throat if they sit even but a short time in a room that has been lately washed.

ACRID or irritating food may likewise inflame the throat, and occasion a quincy. It may also proceed from bones, pins, or other sharp substances sticking in the throat, or from the caustic fumes of metals or minerals, as arsenic, antimony, &c. taken in by the breath. This diæsis is sometimes epidemic and infectious.

(Buchan's Domestic Medicine, 1786.)

TABLE 1—Numbers of patients who attended the accident and emergency department (AGE, by age, related to the population of the practice, and attendance rates per 1000 patients a year

Age (years)	No. of patients attending A & E (and percentage of practice population)	No. of patients in the practice	Attendance rates per 1000 patients a year
0-5	67 (18%)	576	116
6-15	102 (27%)	726	140
16-29	109 (29%)	1091	100
30-59	69 (19%)	274	25
All ages	293 (81%)	2821	104
All adults 16-60+	226 (63%)	1946	116

The difference between the attendance rate of children aged 0-15 and that of adults 16-60+ was highly significant ($P < 0.05$). The difference between the attendance rate of children aged 0-15 and that of young adults aged 16-29 was significant ($P < 0.05$). There was no significant difference between the two age groups 16-29 and 30-59. The lower attendance rate of elderly patients 60+ compared to that of other adults was highly significant ($P < 0.01$).

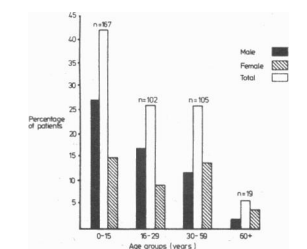


FIG. 1—Distribution by age and sex of practice patients who presented to the accident and emergency department.

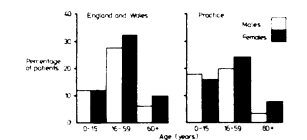


FIG. 2—Percentage of patients by age and sex in the practice and in England and Wales.

TABLE 2—Details of patients managed by the accident and emergency department by age group

Age (years)	Hospital admissions	Revised in hospital clinic	General practitioner follow-up	Discharged
0-5	15 (9%)	40 (24%)	71 (43%)	41 (24%)
16-60+	23 (10%)	48 (22%)	103 (45%)	52 (23%)
Percentage of all ages	9.5	23	44	23.5

while previous drug overdose was more common in those aged 16-60+. General medical, surgical, and obstetrical problems were more common in the 16-60+ age group, acute illness being the fourth commonest cause of an adult presenting at the accident department. The only patients with non-accidental injury, despite vigilance in searching for this group, were two 14-year-old girls who had taken drug overdoses. Road traffic accidents were uncommon, even in adults, and no fatalities were recorded in this study.

The distribution of patients managed by the accident and emergency department was remarkably similar in both age groups (table 1). Most patients (67%) needed only simple investigation and treatment and were either discharged or referred to the general practitioner for follow-up; 23% required follow-up in a hospital clinic; 49% at the fracture clinic (29 aged 0-15, 23 aged 16-60+), six at the hand clinic, and 33 for general review next day in the accident department; 9% were admitted to hospital; 15 aged 0-15, of whom four had ingested medicine accidentally, two had taken a drug overdose, three had fractures, four had head injuries, and two had febrile convulsions; of the 23 patients admitted to hospital in the 16-60+ age group, eight had acute general medical problems, seven had taken a drug overdose, four had fractures, two had head injuries, and two had been in road traffic accidents. Of the 167 patients aged 0-15 who attended the accident department (table 1), 75% were schoolchildren aged 5-15, 66% of these were admitted to hospital and 92% sustained fractures.

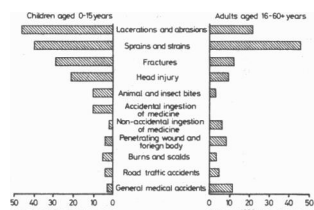


FIG. 3—Types of accidents and illness that presented to the accident department, and the rates per 1000 patients per year for the age groups 0-15 and 16-60+.

TABLE 3—Details of patients aged 0 to 15 years attending the accident and emergency department

Age (years)	No. (%) of patients	Male	Female	Hospital admissions	Fractures
0-4	41 (24%)	31	10	5 (6%)	24 (92%)
5-15	126 (75%)	31	95	10	24

Discussion

Young patients aged 0-15 years from one general practice attended the accident department at hospital much more frequently than patients in the age groups 16-29, 30-59, and 60+ or in the combined age groups 16-60+. The findings that nearly one child in five attended the accident department during the year (17% in the 0-15 age group) and that 30% of the patients seen at accident departments will be under 16 years of age are similar to those reported from South Glamorgan¹ and Sheffield.² In this study, however, 75% of patients in the age group 0-15 were schoolchildren aged 5-15. Most patients sought advice from the accident department about accidents and injuries rather than about illness and general medical problems, and this was especially so for young patients in the 0-15 age group when

Organising a Practice

Organising health education

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The highways and byways of general practice are littered with lost opportunities for health education. The doctor may not see the need, or may see it and not meet it. The patient may not accept that there is a problem and rebuts the doctor's attempts at health education. As providing health care becomes more complex and expensive, the patient and doctor become partners in maintaining health and preventing and managing disease. Both seek and impart facts about health and disease so that both will benefit. How does the general practitioner organise the promotion of health, advice about prevention and management of disease, and the correct use of medical services in his practice—all of which may be considered as health education?

The consultation

General practitioners have great opportunities for educating patients about health during the consultation. The disease incident that the patient presents with may provide opportunities for health teaching, subsequent prevention, and the management of the current problem. There are obvious topics for discussion when the patient is a smoker with an episode of bronchitis, but the common problem of the febrish child may lead the doctor to check on the immunisation status of the child, give advice about nursing management, and discuss the use of aspirin versus paracetamol, the non-prescription of antibiotics in viral infections, exclusion from school or nursery, and subsequent action by the parent if the fever does not abate. The possibility of side effects occurring from prescribed medicines and the duration of treatment are mentioned. Many general practitioners already do this without realising that it is health education, taking a common-sense view that it is part of their normal practice to give such advice. Some effort must be made, however, to check that such details are not neglected, and no consultation is complete until some health education has been given. Depending on the doctor's beliefs and practice, the doctor may (a) dispel widely held myths about health; "can't get pregnant for the first time," "acid foods bad for rheumatism," "coated tongue means you're constipated," and so on; (b) carry out screening procedures to detect potential problems—deafness, high or low blood pressure, glycosuria and albuminuria, and cervical cytology; (c) identify smoking habits and record in the notes the number of cigarettes smoked so that the question may be asked again at the next consultation; (d) identify the need for contraception in both men and women; (e) weigh the patient and give advice about diet in obviously obese patients.

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The five-minute consultation is usually not long enough to give due consideration to health education, and the first consultation is usually the best time for such teaching. It is more time to consider personal, family, and social aspects as well as the presenting problem. Communication will be more effective if the doctor uses simple techniques such as repeating advice and instructions, using short sentences, arranging the information in clear categories, and giving concrete advice rather than vague generalisation. The fragmentation of the consultation by frequent telephone calls or other interruptions is unhelpful—the person who has priority is the person consulting the doctor. The effectiveness of health education is enhanced by the demeanour of the doctor—a welcoming face rather than a muttered greeting into the notes, and eye contact unhindered by the clutter of desk furniture.

The practice

It is vitally important that the other doctors in the practice agree on the approach to important health education topics such as smoking on practice premises, writing repeat prescriptions, prescribing placebos, and prescribing self-limiting illness such as the common cold. No member of the practice team should smoke on practice premises since precept is important, and attitudes about the use of seat belts, for example, should be discussed and a policy formulated. Health education is most likely to flourish when the patient recognises that there is concern for his well-being and care when he is unwell, and any practice procedures that seem to militate against this should be reviewed. Unpunctuality by anyone on the staff—that may cause long waits by patients, for example—is most unhelpful to the cause of health education.

THE TEAM

There must be a co-ordinated effort by the practice team to consider their individual roles in health education. The health visitor is the specialist and should be the innovator in health education and stimulate the other team members. She is the link between the practice and sources of help in the district health authority, and is likely to be able to liaise with the health education officer regarding health education campaigns. Nurses and midwives, like general practitioners, have ideal teaching situations during their work. Morbidity recording will identify common or growing problems as targets for health education.

FORMAL TEACHING

In addition to the opportunities for health education in the consultation, there is scope for more formal teaching. Age registers will identify the number of patients in groups that need