

Illness in a summer holiday camp

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SUMMARY. (1) The medical needs of patients staying at a holiday camp during the summer of 1974 have been analysed.

(2) Medical advice was sought from a doctor about half as often as would have been expected from a comparable population at home, but the camp nurse saw three times as many patients as the doctor.

(3) The clinical content of the consultation was analysed.

(4) The outcome of the consultations and the role played by the nurse are discussed.

Introduction

The medical needs of holiday-makers are largely unknown. Published studies so far comprise a study of ski-ing injuries in Aviemore (Wirk, 1973), a survey of accidents in Kirkcudbrightshire (Christie, 1971), and a survey of cliff falls and related accidents in Torbay (Partridge, 1974). Lynch (1959) from Kenya and Pacy (1961) from Australia have published surveys of illnesses observed in visitors. But in all these studies the patients have come from a population of unknown size.

Aim

My aim was to study the general medical services provided for a defined community in a holiday camp during the summer of 1974.

Method

The camp

There is a holiday camp in Seaton, Devon in which the numbers and ages of the campers are known. The camp, when fully occupied, can accommodate 705 holiday-makers. It is open from mid-May to late September (19 weeks). Holiday-makers book for one week. The camp owners employ a state registered nurse who attends the camp every day.

The general practices

There are two general practices in the vicinity, and most of the patients who need a doctor go to the practice nearer the camp. Both practices took part in the study.

The next nearest practice (apart from these two) is seven miles away, and the nearest accident and emergency department at a hospital is 23 miles away. As there was a nurse at the camp and the visitors' activities took place mainly in the camp and its immediate neighbourhood, it is unlikely that any camper was treated elsewhere without our knowledge.

Throughout the summer of 1974 a record was kept of all the consultations carried out both by the nurse and all the doctors. The time of consultation, age, and sex of the patient, clinical content, and therapy were noted.

Results

The camp authorities request information on their booking forms about the age group of applicants. Although more detailed information is not available, these figures can be used to define the practice population of the camp.

Table 1 shows the profile of the camp population compared with that of the general population by age groups, the figures for which were obtained from the 1971 census (Office of Population Censuses and Surveys and The Royal College of General Practitioners, 1974).

TABLE 1
AGE DISTRIBUTION OF CAMPERS COMPARED WITH THE GENERAL POPULATION

| <i>Holiday-makers in camp during 1974</i> | | | <i>Per cent of general population by age groups</i> |
|---|---------------|------------------------------------|---|
| <i>Age (years)</i> | <i>Number</i> | <i>Per cent of camp population</i> | |
| Less than 3 | 450 | 3.9 | 4.8 |
| 3-13 | 1,832 | 15.7 | 16.3 |
| Adult | 9,400 | 80.4 | 78.9 |
| Total | 11,682 | | |

In table 2 the number of first consultations by nurse and doctor, i.e. episodes of illness, is recorded. The percentage of the population seen each week is calculated by age groups.

TABLE 2
DISTRIBUTION OF FIRST CONSULTATIONS

| <i>Total number of patients seen by:</i> | | | | | <i>Per cent of camp population seen by:</i> | |
|--|--------------|----------------------------------|---------------------------------|---------------------|---|---------------|
| <i>Age (years)</i> | <i>Nurse</i> | <i>Doctor by direct approach</i> | <i>Doctor referred by nurse</i> | <i>Doctor total</i> | <i>Nurse</i> | <i>Doctor</i> |
| Less than 3 | 106 | 24 | 14 | 38 | 23.6 | 8.4 |
| 3-13 | 89 | — | 19 | 19 | 4.9 | 1.0 |
| Adult | 340 | 34 | 93 | 127 | 3.6 | 1.4 |
| Total | 535 | 58 | 126 | 184 | 4.6 | 1.6 |

Of the 184 patients seen by the doctor, 126 were referred to him by the nurse, and 58 approached him direct. If these 126 are excluded from the doctors' total (as having already been seen by the nurse) then a total of 593 individuals, i.e. 5.1 per cent of the camp population, presented with an episode of illness during their week's holiday.

The illness prompting the consultation was classified as chronic (i.e. present before the holiday began), acute, or maternity and the results are shown in table 3.

TABLE 3
TYPE OF ILLNESS

| <i>Type</i> | <i>Nurse</i> | | <i>Doctor</i> | |
|-------------|---------------|-----------------|---------------|-----------------|
| | <i>Number</i> | <i>Per cent</i> | <i>Number</i> | <i>Per cent</i> |
| Chronic | 21 | 3.9 | 42 | 22.8 |
| Acute | 514 | 96.1 | 141 | 76.6 |
| Maternity | 0 | 0 | 1 | 0.5 |

TABLE 4
CLINICAL CONTENT OF FIRST CONSULTATION

| | <i>Nurse</i> | | <i>Doctor</i> | | <i>National average per cent of all consultations</i> |
|---------------------------------|--------------------------------|--------------------------------------|--------------------------------|--------------------------------------|---|
| | <i>Number of consultations</i> | <i>Per cent of all consultations</i> | <i>Number of consultations</i> | <i>Per cent of all consultations</i> | |
| Urinary tract | 1 | 0.2 | 2 | 1.1 | 5.4 |
| Trauma/violence | 188 | 35.1 | 37 | 20.1 | 5.9 |
| Respiratory illness | 58 | 10.9 | 42 | 22.9 | 22.0 |
| Skin disorder (or allergy) | 23 | 4.3 | 24 | 13.0 | 7.5 |
| Eye/Ear disease (foreign body) | 18 | 3.4 | 12 | 6.5 | 6.5 |
| Gastrointestinal | 168 | 31.4 | 23 | 12.5 | 3.9 |
| Heart disease | 3 | 0.6 | 3 | 1.6 | 5.0 |
| Musculoskeletal (non-traumatic) | 14 | 2.7 | 7 | 3.8 | 6.1 |
| Psychiatric | 8 | 1.5 | 6 | 3.3 | 8.0 |
| Other | 54 | 10.1 | 28 | 15.2 | 29.7 |
| Total | 535 | 100 | 184 | 100 | |

TABLE 5
CONSULTATION ACTIVITY (ALL CONSULTATIONS)

| | <i>Nurse</i> | | <i>Doctor</i> | |
|----------------------------------|---------------|-----------------|---------------|-----------------|
| | <i>Number</i> | <i>Per cent</i> | <i>Number</i> | <i>Per cent</i> |
| Dressing | 216 | 24.2 | 13 | 6.8 |
| Injection | 6 | 0.7 | 4 | 2.1 |
| Minor surgery | 7 | 0.8 | 4 | 2.1 |
| Referred to undertaker | 0 | 0 | 2 | 1.0 |
| Referred to doctor | 126 | 14.1 | 0 | 0 |
| Referred to casualty department | 0 | 0 | 13 | 6.8 |
| Referred to hospital (admission) | 0 | 0 | 5 | 2.6 |
| Referred to dentist | 1 | 0.1 | 0 | 0 |
| Prescription | 0 | 0 | 156 | 81.2 |
| Medication from stock | 447 | 50.1 | 0 | 0 |

The clinical content of the consultation has been analysed under broad headings. The proportions seen by the nurse and the doctors are shown in table 4. This table also includes—in the last column for comparison—the results of an analysis of the clinical content of consultations carried out by general practitioners in their own practices (from *Morbidity Statistics from General Practice*, Office of Population Studies and Censuses and the Royal College of General Practitioners, 1974).

The outcome of the consultation in terms of action taken by the nurse and doctors is shown in table 5.

Discussion

It is difficult in a study of holiday illness to estimate the holiday population from which the patients are drawn. In any holiday area during the summer it is impossible to know how many people there are staying in hotels, guest houses, tents, and caravans.

In this study some information about the age structure of the camp population was known, and was found to be similar to that of the general population (table 1).

The total consultation rate showed that 1·6 per cent of the camp population needed to consult a doctor during their holiday. The National Morbidity Study (*Morbidity Statistics from General Practice*, 1970–71) showed that 3·7 per cent of the whole population reported a new episode of illness to their doctor each week.

There are three observations to be made about this comparison. First, the camp nurse saw in addition three times as many patients as the doctor; the total episode rate, excluding those patients referred by the nurse to the doctor, being 5·1 per cent. This is considerably higher than the national morbidity average. Secondly, a far higher proportion of babies and young children was seen than any other age group (table 2). Thirdly, the clinical content of holiday consultations differs from that of the population at home (table 4).

Trauma, or illness involving the gastrointestinal tract (mainly diarrhoea and sickness), were responsible for 66 per cent of the camp nurse's first consultations. How many of these would have come to the doctor or how many would have persisted with home remedies had the nurse not been available on the camp is not known.

When the clinical content of the doctors' consultations is compared with the national average, the differences are not so marked. Although there is still a considerably higher proportion of episodes due to trauma or gastrointestinal disease, the other differences appear to reflect the fact that the large majority of illnesses for which the holiday-maker contacted the doctor were acute rather than chronic (table 3).

The outcome of the consultations (table 5) shows that the nurse's work consisted largely of dressing abrasions, cuts, and sprains, or giving medication from stock. The "stock" comprised simple lotions and creams, mild analgesics, and Mist. kaolin sed. The high prescription rate for the doctors may be explained by the sieving effect of the nurse, and the acute nature of the complaints with which they were faced. The 13 patients referred to the accident and emergency department were all the results of accidents.

When considering the whole pattern, the main conclusion is that of the 535 people who consulted the nurse, 409 were treated by her (76 per cent) without the further assistance of a doctor. She managed 80 per cent of incidents due to trauma, and over 70 per cent of gastrointestinal upsets. There was no question of the patients being "screened" by the nurse before they were seen by the doctors, but the nurse was available on the camp each day holding a "continuous surgery," and it would be natural for a patient to ask her advice before going a mile up the road to a doctor's surgery.

In short, although in this case the nurse was employed by the camp authorities, our experience would support the view that a practice nurse, with direct access by patients, can play a very valuable part in the practice organisation, and that her traditionally more limited role should be extended.

If, however, practice nurses adopt this extended role, then I believe safeguards for patients, nurses, and doctors as envisaged in the Joint Report of the Royal College of Nursing and the Royal College of General Practitioners (1975) published in the *Journal of the Royal College of General Practitioners* are essential.

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A LONG-TERM CONTROLLED TRIAL OF SCREENING FOR HYPERTENSION IN GENERAL PRACTICE

A controlled trial was undertaken to evaluate the practical consequences of screening in general practice. Of 2,420 people aged 40-64 years examined in 1967-68, 191 (7.9 per cent) had previously been told, at some time, that they had raised blood pressure, other than during pregnancy. However, only 77 (3.2 per cent) had any record of current antihypertensive treatment. Screening resulted in a further 50 persons (2.1 per cent) being newly diagnosed as hypertensive in 1967-68 and a further nine in 1969-70. Antihypertensive treatment was given to 21 of these immediately following diagnosis, while the treatment was adjusted in 23 of those already known to be hypertensive. In 1972-73 the blood pressures of the screening population were directly compared with the control group. No significant differences in the distributions of their blood-pressure levels were observed. Over 95 per cent of the new hypertensives discovered by the screening process in the control group in 1972-73 had visited their general practitioners for some reason during the previous five years. This suggests that "case-finding" by general practitioners would be more cost-effective than setting up separate blood pressure screening clinics. However, the results of this study indicate that we need to know more about how raised blood pressure can be successfully controlled over a long time, before any mass screening programmes can be actively encouraged.

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TREATMENT OF ROSACEA BY METRONIDAZOLE

A double-blind trial in 29 patients with rosacea showed that, after six weeks' treatment, metronidazole was therapeutically superior to a placebo ($P < 0.02$). It was particularly effective against papules and pustules. The mode of action of metronidazole and other antibiotics in rosacea is not known.

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