Hospital Topics

Effects of influx of holidaymakers on an acute medical unit in Cornwall

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Summary

This paper illustrates the effect of a large influx of holidaymakers on a medical unit in Cornwall. Increasing numbers of visitors are coming to Cornwall and, unless adequate resources are allocated for their efficient medical care, the medical facilities available to the residents will suffer greatly.

Introduction

Cornwall is situated in the most south-westerly part of England and has an area of 880 000 acres. Because of its beautiful beaches, sailing, and, more recently, the popularity of surfing tourism has been increasing and should be encouraged. The resident population, including that of the Isles of Scilly, is 385 390¹; 22% are of school age and 17.6% over 65. The number of tourists has shown a steady increase from 2 090 000 in 1964 to 3 000 000 in 1973. Peak numbers at one time have risen from 187 000 in 1964 to 250 000 in 1973.

Medical facilities

The acute medicine in the area is provided by general practitioner-supported hospitals at Bodmin, Fowey, St Austell, Newquay, and Helston. Some acute medicine is dealt with at West Cornwall Hospital and Penzance and Tehidy Hospital; however, the main medical unit is at the Royal Cornwall Hospital (Treliske), Truro. This is phase I of a general district hospital built in 1966. It has 87 medical beds, including a coronary care unit of six beds and an intensive care unit of four beds. Discounting neurology, dermatology, and haematology beds, however, the effective number of acute medical beds is 66. The medical unit at Treliske is under intense pressure all the year round and the demand is increasing (see table I).

TABLE I—Admissions to medical and coronary care units 1970-3

	1970	1971	1972	1973
Medical division . . .	2953	3019	3366	3406
Coronary care division	463	519	628	701

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The district hospital's catchment population is 308 275.³ The weighted population which allows for tourists is 323 465.³ When calculating salaries of county council officers, however, the weighted population is about 368 000, and with a peak number of visitors of 250 000 and a total number of visitors of 3 000 000² the revenue allocation is adequate.

Study

Our study was an attempt to ascertain how many holidaymakers were admitted to the central medical unit between 1 April and 30 September 1973, the categories of diagnosis, and the resultant effect the visitors had on residents' facilities.

All holidaymakers admitted to the medical unit in this period were assessed, and a proforma, giving details of age, method of travel, journey time, whether they had seen a general practitioner in the preceding month, together with a provisional diagnosis, was completed by the nursing officer. The final diagnosis for each patient was checked by a doctor. Detailed records of admissions to the coronary care unit were also kept for both holiday visitors and residents.

ADMISSIONS

The medical unit admitted 186 tourists and 1420 residents. Tourists represented 13% of admissions over the period, but 20% in August. The reasons for admission among holiday visitors could be broadly classified as in table II. The coronary care unit admitted 336 residents and 61 holiday visitors (15.4%).

Many visitors were admitted to the medical unit with coronary vascular disease. The surprisingly high numbers of younger men who had myocardial infarction and who had just completed a long journey, usually greater than 10 hours with only minimal breaks, suggested that this may be a potent precipitating cause of myocardial infarction. This will be the basis for further study.

TABLE II—Classification of tourists' diagnoses with percentage of total admissions

Diagnosis	No of tourists	% of total admissions
Coronary vascular	91	44.6
Cerebrovascular	22	11.7
Near drowning/overdose/snake bite	15	8.2
Gastrointestinal tract	12	6.4
Respiratory	16	8.7
Deep vein thrombosis/pulmonary embolus	7	3.7
Renal	5	2.1
Miscellaneous	18	9.6

TABLE III—Numbers of patients seen in casualty department at Royal Cornwall Hospital in each quarter. Increase in third quarter was due to tourist influx

Quarter ending	New patients	Total attendances
March 1973	4566	5519
June 1973	6253	7471
September 1973	8723	9826
December 1973	4698	5637

TABLE IV—Average length of stay in medical unit 1972-3

	June-Sept 1972	Sept-Dec 1972	Dec-Mar 1973	Mar-June 1973	June-Sept/1973
Average length of stay (days)	8.0	8.9	10.1	8.4	7.7

TABLE V—Sickness rates and number of nurses leaving 1973

Month:	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
No of days lost through sickness	50.5	15	11	19	54	23.5	31.5	39.5	14.5	46.5	14	8
No of nurses leaving	3	1	5	3	2	1	6	7	—	1	2	3

TABLE VI—Sizes of waiting lists in areas of south-west England 1972-3

Area	Quarter ending						
	30 June 1972	30 Sept 1972	31 Dec 1972	31 Mar 1973	30 June 1973	30 Sept 1973	30 Dec 1973
Cornwall . .	1444	1455	1690	2050	2104	2188	2398
Avon . .	3134	2759	2807	3611	3187	2600	2887
Devon . .	5456	5243	4339	4481	4598	4039	3882
Gloucester . .	2458	2525	2889	2834	2996	3016	3226
Somerset . .	1560	1563	1587	1895	1829	1761	1778

Discussion

It is well known that many tourists in an area will stretch the already overburdened casualty services (table III)⁴ but less well known how tourists affect the running of a medical unit.

Lataillade⁵ points out that tourism is no longer the privilege of a specific social class, nor is it limited to the relatively young. Old people are taking more and more advantage of holiday arrangements at places far from home. The changes in the pattern of holiday visits to Cornwall is apparent from the number of tourists staying in caravans and tents. In 1972 107 400 visitors stayed in static or touring caravans or tents, 107 500 in hotels, and 26 700 with friends.²

The number of people staying in caravans and tents is increasing rapidly. This is vitally important because an increasing proportion of sick tourists will have to be admitted to hospital because of the poor facilities of the places in which they are staying. The many tourists admitted through the medical unit have created important problems. The average length of stay in hospital is reduced during the summer months (table IV) because the constant pressure for beds and large number of

daily admissions during the summer months makes it difficult to accommodate all emergency admissions, and patients often have to be sent home earlier than we would like. A medical waiting list of patients for investigation appears only during the summer months.

Ward-to-ward transfers have increased and job satisfaction for doctors and nursing staff has decreased. This is partially supported by the number of nurses leaving in the summer months and sickness rates (table V).

It may be difficult to arrange suitable transport to return patients to their home areas. The resultant delays may seriously inconvenience relatives who have to remain in Cornwall after their holiday would normally have finished.

A further serious side effect in the area has been the restriction of routine surgical admissions, which has resulted from a red alert being declared because the medical unit has overflowed to surgical beds. The waiting list has increased steadily. Figures for other areas do not show such an increase (table VI). This will, in the long term, seriously affect relations between the hospital and the residential population. It is vital, therefore, that adequate extra funds are allocated to holiday areas, such as Cornwall, to provide realistic health care for the visitor, while ensuring that the residents do not suffer.

References

- ¹ Registrar General's Statistical Review of England and Wales for 1972 pt II Population. London, HMSO, 1974.
- ² Cornwall Tourist Board, personal communication.
- ³ South Western Regional Hospital Board, 1975, personal communication.
- ⁴ Christie, C F, *Health Bulletin*, April 1971, 29, 115.
- ⁵ Lataillade, L, *Royal Society of Health Journal*, 1973, 93, 195.

What substance can be added to heavily chlorinated water to remove the "excess" chlorine?

Water may be dechlorinated by individual householders by using sodium thiosulphate (photographic "hypo"), obtainable from any chemist. To a quart-sized jug of water add a crystal of sodium thiosulphate about the size of a grain of rice; stir well and taste, repeating this procedure until the chlorinous taste has disappeared. Hypo is quite harmless and only when added in large excess (50 ppm) over the amount needed to neutralise the chlorine will this chemical impart its own characteristic taste and odour to the water. This should never occur in practice if the above procedure is carried out conscientiously.

What is the best form of contraception in a woman of 33 (with three children) who has developed multiple sclerosis?

The same considerations apply as they do in a normal woman. A wide search of published work has shown no conclusive evidence of any adverse effect on multiple sclerosis of steroid contraception. This

might have been predicted from the evidence that pregnancy has no proved effect on the course of the disease. Probably the less therapy by drugs the better in a disorder with such variability, however, so if she and the husband are psychologically suitable, perhaps sterilisation might be best. It is not usually thought wise to sterilise a husband for disease in the wife, but there must be exceptions to every rule.

Do luminous watch and clock faces emit radiation to a dangerous extent?

Although early luminous watches and clock faces were painted with derivatives of radium and thorium, they do not constitute a hazard to the wearer as the genetically weighted dose from them, and also from the old fashioned shoe fitting machines, was only 1.1 mr/year. After 1950 a newer isotope, promethium, was used and since 1970 the activator has been tritium, both of which have been applied with the appropriate phosphor. Neither of these substances are external emitters, so reducing the possible hazard still further, but as with thorium they may accumulate in the body if ingested.

The Hazards to Man of Nuclear and Allied Radiations. London, Medical Research Council, 1956.