

## *Reasons for referral to hospital*

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**SUMMARY.** In a study in North-east Scotland, nine out of ten patients had a "medical" reason for referral to hospital—in half it was the severity of their illness and in half the need for investigation or special treatment. One out of five patients was in need of intensive nursing care and one out of 20 patients had a social reason for admission to hospital. General practitioners with access to cottage hospital beds would choose to treat over one quarter of their own patients. The choice of hospital was influenced by the doctor's diagnostic certainty.

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### Introduction

The numerous studies of general practitioners and their use of hospital beds can broadly be divided into two groups—the survey of the use made of existing hospital beds and services, and secondly, the suitability of patients for general-practitioner care in hospital.

Various aspects of the use of hospitals by general practitioners have been considered—the admission rate of patients, the type of patient, and reason for admission, and the suitability of the patient for a cottage hospital.

Several reports (Hopkins, 1956; Fry, 1959; Wood, 1964; Wilson, 1971) have classified the reasons for referral, and in general these fall into three groups—for second opinion, for investigation, and for treatment. There is a wide range of results depending on the definitions used and reflecting the attitude of the doctor and the area of his practice.

The lack of comparative studies of areas where access to general-practitioner beds is possible and where it is not, has been commented upon by Robinson (1973) and the need for such studies emphasised by Israel and Draper (1971) and Oddie *et al.* (1971).

### Aims

The purpose of this study was to compare the use made of hospital beds in North-east Scotland during a period of one year by a population with access to cottage and general hospital beds, and by a matched population with access only to general medical hospital beds.

### Method

This was a prospective study based on the referral of individual patients for in-patient care, and involved 20 general practitioners with a total list of 34,000 patients.

Immediately a patient from one of the selected practices was admitted to any hospital in the Grampian Health Board area, a questionnaire was sent to the patient's own doctor. The questionnaire was divided into four parts—the first being the identification of the patient and general practitioner; the second the preferred choice of hospital; the third being the reason for referral to hospital; and finally the diagnosis made by the general practitioner and the confidence with which he made that diagnosis.

### Results

The questionnaires completed and returned numbered 1906, this being 98 per cent of the questionnaires sent out.

#### *(1) Choice of hospital*

For one out of five patients the general practitioner would have chosen a cottage hospital for the admission of his patient. When cottage hospitals were available the doctors would have

chosen to admit 28 per cent of their patients to them, whereas when no such facilities existed the general practitioner would only consider such an admission desirable, given the choice, in five per cent of admissions.

(2) *Reason for referral*

There were 344 admissions in which a cottage hospital would have been the unit of choice for in-patient referral, and 1,562 admissions in which a general hospital bed was chosen.

The reasons for referral to hospital were broadly classified into medical, nursing, and social reasons. The medical reasons were: gravity of illness, the need for investigation, or for special treatment; the nursing reasons were the need for intensive nursing, inadequate home conditions, or the lack of necessary equipment; the social reasons were living alone, overcrowding, or pressure from relatives. More than one reason for referral was given for some patients.

In over 90 per cent of patients a 'medical' reason (table 1) was given for referring the patient to hospital. On 724 occasions (41 per cent) it was the gravity of illness that needed admission. In over half the patients (59 per cent) the reason for admission was for investigation and/or treatment.

TABLE 1  
MEDICAL REASONS FOR REFERRAL

<i>Reason</i>	<i>General hospital</i>		<i>Cottage hospital</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Gravity of illness	140	9	99	39
Investigations	490	31	24	10
Special treatment	368	23	54	21
Gravity and investigations	122	8	20	8
Gravity and treatment	129	8	41	16
Investigation and treatment	171	11	8	3
Gravity, investigation & treatment	166	10	7	3
	<u>1586</u>	<u>100</u>	<u>253</u>	<u>100</u>

When considering the patients where the general practitioner would have chosen a cottage hospital, it was found that gravity of illness played a significant part (66 per cent) while, as might have been expected, the need for investigation and treatment played a much smaller part (34 per cent).

In 18 per cent of patients a nursing requirement (table 2) was given as the reason for referral to hospital whether general or cottage.

TABLE 2  
NURSING REASONS FOR REFERRAL

<i>Reason</i>	<i>General hospital</i>		<i>Cottage hospital</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Requires intensive care	99	71	102	50
Inadequate home conditions	16	11	63	31
Intensive care and poor home conditions	17	12	35	17
Lack of adequate equipment	4	3	1	1
All three reasons	4	3	4	2
	<u>140</u>	<u>100</u>	<u>205</u>	<u>100</u>

In 253 admissions (73 per cent) the need was for intensive nursing care, while in a further 79 admissions (23 per cent) the reason was inadequate facilities for home nursing.

In the patients where a cottage hospital was chosen, 205 (59 per cent) were admitted for "nursing reasons" as compared with 140 (nine per cent) of the admissions to a general hospital. This underlines the role of the cottage hospital as a nursing unit, and this was emphasised by the fact that almost one third of the patients admitted to a cottage hospital for "nursing reasons" had inadequate home conditions.

Social reasons for admission to hospital (table 3) were given in six per cent of referrals.

TABLE 3

<i>Reason</i>	<i>General hospital</i>		<i>Cottage hospital</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
Living alone	27	69	45	59
Pressure from relatives	11	28	29	38
Other	1	3	2	3
	—	—	—	—
	39	100	76	100
	—	—	—	—

Seventy-five patients were living alone (four per cent) and there were 40 patients (27 per cent) in whom the relatives had brought pressure to bear on the doctor. When the group of patients admitted to a cottage hospital was examined it was found that eight of them had a purely social reason for admission to hospital—in other words there was no stated medical or nursing requirement—and again these were divided into living alone and pressure from relatives.

### (3) *Certainty of diagnosis*

The general practitioner was fairly confident ("certain" and "probable") of his diagnosis in 84 per cent of patients, and less confident ("possible" and "undiagnosed") in 16 per cent of patients. The degree of confidence varied by disease category—being more confident for such groups as respiratory disease, skin disease, accidents and poisoning, and less confident for such groups as blood disease, digestive system disease, and central nervous system disease.

General practitioners were much more confident about the diagnoses of the patients they admitted to a cottage hospital—76 per cent of all cottage hospital admissions had a "certain" diagnosis as compared with 56 per cent of patients admitted to Aberdeen hospitals. Conversely, only one per cent of cottage hospital patients were "undiagnosed" as compared with ten per cent of patients admitted to Aberdeen hospitals.

The diagnoses made by the general practitioner when referring a patient to an Aberdeen hospital were compared with the diagnoses on discharge from hospital. They were found to agree on 53 per cent of occasions, and on a further 17 per cent of admissions the lack of agreement was over a symptomatic diagnosis. For example, the general practitioners diagnosed acute appendicitis in 70 patients admitted to hospital; the hospital agreed on 32 patients, made a symptomatic diagnosis for 16 patients, and disagreed on 22 occasions.

### Discussion

The availability of a hospital bed is often the controlling factor in the admission of a patient to hospital and may not be related to the general practitioner's "choice" for the particular patient. In this study the doctors were asked to indicate their hospital preference as if a choice existed. The finding that in over a quarter of admissions the general practitioners with cottage hospital beds were willing to care for their own patients is in agreement with the studies of Meredith *et al.* (1968), Loudon (1972) and others.

The acute onset of illness was more characteristic of those patients admitted to a general rather than a cottage hospital, and in the majority of these patients the reason for referral was need for investigation and special treatment.

In over half the patients admitted to a cottage hospital the principal reason for referral was the need for nursing care, and these hospitals also admitted more of the patients who were living alone or in social need.

Patients admitted to a cottage hospital more commonly had circulatory or respiratory disease, and in these patients the general practitioners were more "certain" of the diagnosis.

There is no doubt that some patients require to be admitted to a general hospital under any circumstances, and on the other hand there are patients in hospital who could be treated at home if the conditions were suitable. The role of the general-practitioner bed in a cottage hospital appears to be for those patients where the doctor is confident of his diagnosis and who require nursing care and routine treatment. Conversely, the cottage hospital would be unsuitable for patients requiring extensive investigations or specialised treatment.

#### REFERENCES

- Fry, J. (1959). *British Medical Journal*, **2**, 1322-1327.  
 Hopkins, P. (1956). *British Medical Journal*, **2**, 873-877.  
 Israel, S. & Draper, P. (1971). *British Medical Journal*, **1**, 452-456.  
 Loudon, I. S. L. (1972). *Journal of the Royal College of General Practitioners*, **22**, 220-226.  
 Meredith, J. S., Anderson, M. A., Price, A. C. & Leithead, J. (1968). 'Hostels' in hospitals? Nuffield Provincial Hospitals Trust. London: O.U.P.  
 Oddie, J. A., Hasler, J. C., Vine, S. M. & Bennett, A. E. (1971). *Lancet*, **2**, 308-310.  
 Robinson, R. B. (1973). *General-practitioner hospital beds: A regional census and survey of patients and facilities*. S.E. Metropolitan Regional Hospital Board.  
 Wilson, J. B. (1971). *Health Bulletin (Edin)*, **29**, 186-187.  
 Wood, L. A. C. (1964). *Journal of the College of General Practitioners*, **8**, 223-231.

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## SPINAL INJURIES

When you are discharged from the Spinal Centre for the first time, your GP (family doctor) will get a detailed letter, describing your injury and suggesting further help he can give you. If you and your GP get on well, if he comes to see you at regular intervals, if he even knows something about para- and tetraplegia because he has attended one of the special courses, he will come at once should you have to call him. But you may not be so lucky. If you need a doctor, you or a member of your family should 'phone him. If he is not willing or able to see you the same day, 'phone your Centre. There they know all about you. Often they may advise you over the 'phone as to what you can do yourself, and all may be well. Or they have to suggest that you 'come in' at once. Unfortunately they will not always have a bed for you at once, and may have to suggest that you have yourself admitted to your local hospital. There they may or may not know about your special needs. For example, if they have no turning beds, if you can't turn yourself, and if the hospital is short of staff, particularly at night, you won't be turned, and will get pressure sores which develop much more quickly when you are ill. If you need catheterisation, this may not be done as cleanly or as gently as you know it ought to be done. If you have to have an operation or if you have broken a bone, you will need blood transfusions more urgently than the non-paralysed. If you find yourself in a hospital without special facilities or experience, show this book to your doctor.

#### REFERENCE

- Spinal Injuries Association (1975). *So you're paralysed?* London: S.I.A.