Cardiac rehabilitation in Britain (1970)

B. M. Groden, T. Semple, and G. B. Shaw

From the Departments of Cardiology, Southern General Hospital and Victoria Infirmary, Glasgow

Rehabilitation implies the total care of the patient from the start of illness to return to work or normal circumstances, and some include the management of his future way of life and activities. In the past it has received somewhat scant attention from general physicians and surgeons working in hospital who have, more often than not, been content to leave the problems of convalescence and return to work to other agencies. There have been notable exceptions and, among these, rheumatologists and orthopaedic surgeons have a particular place. Indeed Britain probbably led the field in postwar orthopaedic and traumatic rehabilitation. However, there is a wide area of rehabilitation medicine outside these specialties, which requires to be reviewed and opened up.

One area of medicine at present receiving much attention is the care of patients suffering from acute myocardial infarction, now diagnosed more often in younger and younger age groups, particularly in men. The problem of the future of these relatively young and useful citizens, who survive the attack, forces itself upon the cardiologist, and it has to be admitted that the striking recent advances in management have not always been paralleled by improvements in aftercare. Despite hospital early mobilization programmes, a considerable number of postinfarction cases can be found leading a life of chronic invalidism not justified by their cardiac status.

Recent studies in this country (Sharland, 1964; Wincott and Caird, 1966; Groden, 1967) have shown that of those surviving infarction and leaving hospital apparently fit eventually to resume work, 80 per cent will have returned to their employment within 6 to 8 months without special rehabilitation procedures other than encouragement and advice. But too often little or nothing is done for the remaining 20 per cent of post-infarction patients, and 6 to 8 months is much too long for absence from work in most cases.

Since other countries, notably U.S.A. and Australia, are taking a special interest in cardiac rehabilitation, and also because of increasing interest in the subject among cardiologists in Europe, we decided to make some assessment of the extent to which British cardiologists take special steps to make arrangements of this kind. As members of the British Cardiac Society appeared to be a reasonable sample, we circulated a questionnaire to all members in active practice in adult cardiology. This document sought information about the extent to which facilities for the aftercare of coronary patients were provided in their own hospitals, and also attempted to ascertain attitudes to the introduction of special facilities for cardiac rehabilitation (Appendix).

The questionnaire was sent to 178 members of the Society, excluding honorary members, associate members, and surgical members. When it was known that a number of members worked in the same hospital, steps were taken to avoid duplication of information, but this proved difficult to achieve and in fact some replies came from different physicians working in the same group.

Results

From the 178 doctors circulated, 127 replies have been received; 14 of these were from people who felt they were not qualified to comment (e.g. retired; paediatric cardiologists; radiologists). Thus there were 113 usable replies, a response rate of 69 per cent of the remaining 164. Of the 113 replies, 82 came from teaching hospitals and 31 from non-teaching hospitals. The numbers of replies from hospitals of varying sizes are shown in the Table. Even allowing for a few replies from cardiologists working in the same hospital, this Table does reveal that the sample contained a reasonable scatter of hospitals of different size.

No special cardiac rehabilitation facilities as listed by us in our questionnaire (Appendix) were reported in 90 of the replies. An advisory

TABLE Scatter of replies from hospitals of different 1120

No. of beds	No. of replies
< 300	13
300- 500	27
500-1000	58
1000	15

pambhlet was used in 11 and a work advice clinic existed in 13 hospitals. Nine hospitals reported that some form of exercise programme existed, but on further investigation this seemed very variable, from earlier mobilization to one or two examples of organized physiotherapy and exercise regimens during hospital stay.

Of the 113 cardiologists, 84 were in favour of the development of special services for the rehabilitation of cardiac patients. Twentynine felt that such special services were not indicated. Replies varied from extreme enthusiasm to downright condemnation of the idea. It may be of interest to study some of the phrases used in these replies. Firstly, replies from physicians who were not in favour of the development of such services:

- 'Existing services are not sufficiently used.'
- 'Anticoagulant clinics serve the purpose.'
- 'Most of the problems are psychological.'
- 'The problems should be dealt with in outpatient clinics.
- Staff awareness of the problem is the important thing.'
- 'Not with the present load of existing cardiac services.'
- 'Cardiac and general outpatient clinics are sufficient.'
- 'Educate the physician.'
- 'Careful follow-up required.'
- 'May be useful elsewhere, but not in this hospital.'
- 'Individual appraisal is required; treat the patient not the disease.
- 'Existing facilities are adequate.'
- 'We used to have a work classification clinic, but it was insufficiently used and we closed it down.'
- 'Individual instruction by the physician is necessary.'
- Comments by cardiologists who were in favour:
 - 'Exercise programmes are desirable but only possible in a large hospital or group of hospitals.'
 - We are working on it.'
 - 'Treble the staff, quadruple the room.'

- 'Consultants and senior registrars should do the follow-up; it should not be left to junior doctors.'
- 'Individual advice is required.'
- 'Rehabilitation has been neglected.'
- 'Great difficulties exist in knowing whether or not we are doing any good.'
- 'Very enthusiastic.'
- 'Would be glad to hear of such programmes.'
- '? Advisability of divorcing action from the general clinic.'
- 'No money.'
- 'Psychotherapy is very important.'

Discussion

There can be little doubt that rehabilitation in its most complete sense (which implies physical, psychological, and social resettlement) has been greatly neglected until the present time by the medical profession, both in practice and in undergraduate teaching. Increased costs in the Health Services. national economic circumstances, and a growing public social conscience demand that more attention be paid to this aspect of medical care. Already initial attempts in Sweden at cost-benefit analysis suggest such an approach will contribute to gross national production and economy (Helander, 1970).

Rehabilitation should not necessarily be the sole responsibility of the hospital doctor but he is most strategically placed to initiate such a service. Seventy-five per cent of cardiologists responding to this survey felt that special rehabilitation services were required. Among internists in most countries, it seems that the cardiologists are most aware of this need. In the United Kingdom, rehabilitation services are in the hands of the Department of Employment rather than the Department of Health and Social Security, and to some extent the medical profession must accept responsibility for this state of affairs. Cardiology is particularly well placed to lead the field. Already much has been done to reduce invalidism by earlier hospital mobilization and positive programmes for return to work. Obviously much more could be done along these lines by individual cardiologists. Another area which should be investigated is the value and safety or otherwise of positive exercise programmes after discharge from hospital such as are now in common use in the United States and to some extent in Scandinavia (L. Werko, E. Varnauskas, and colleagues, 1969, personal communication). This would lend itself to multicentre controlled trials and since much of the physiological testing, methodology, and safety precautions have been worked out (Hellerstein, 1969; Bruce,

1970), it should not be too difficult to organize such trials. The main elements required are medical enthusiasm, money, and relatively simple equipment, but we must remember, from our bitter experience over 20 years of attempting to assess the results of long-term anticoagulant therapy in such patients, that evidence of well-defined beneficial results, satisfying statistical scrutiny, may be extremely difficult to obtain. Yet, without such evidence it will be difficult to support an argument favouring widespread development of such services.

Finally, medical undergraduates should be educated in the principles of rehabilitation medicine in all its aspects so that doctors of the future can prescribe not only drugs but a useful and profitable convalescence and advice about return to work.

References

Bruce, R. A. (1970). Physiological responses to physical exercise in health and disease. *Acta Cardiologica*, Suppl. XIV, p. 16.

Groden, B. M. (1967). Return to work after myocardial infarction. Scottish Medical Journal, 12, 297.

Helander, E. (1970). Economic aspects of cardiac rehabilitation. Acta Cardiologica, Suppl. XIV, 53.
 Hellerstein, H. K. (1969). Exercise and the treatment of heart disease. Techniques of exercise; prescription and evaluation. Journal of the South Carolina Medical Association, 65, Suppl. p. 46.

Sharland, D. E. (1964). Ability of men to return to work after cardiac infarction. *British Medical*

Journal, 2, 718.

Wincott, E. A., and Caird, F. I. (1966). Return to work after myocardial infarction. *British Medical Journal*, 2, 1302.

Appendix

services?

7 Any other comments?

I	Name of hospital:			
2	Is it engaged in undergraduate teaching?		Yes/No	
3	No. of beds in hospital (delete inappropriate groups)		300 300- 500 500-1000 1000	
-	4 Do you have any special services or clinics available for rehabilitation of cardiac patients?		Yes/No	
5	If answer to question 4 is yes, what are these services?			
	,	Advisory pamphlet? Work advice clinic? Exercise programme? Other (please specify)	Yes/No Yes/No Yes/No	
6	Do you feel that there is a need for the development of such			

No.

Yes/No

Signature.....

Cardiac Rehabilitation

When complete, please send this form to:

Dr. B. Groden, Cardiac Department, Southern General Hospital, Glasgow S.W.I.