

## THE RETURN TO WORK OF ELDERLY MALE HOSPITAL IN-PATIENTS

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The following study was undertaken to find out to what extent male patients aged 50-64 admitted to the general medical and surgical wards of a teaching hospital were subsequently able to return to work. Three groups were selected for study:

(A) All those admitted to medical firm A's beds between Nov. 1, 1946, and Oct. 31, 1947. 102 patients.

(B) All those admitted to medical firm B's beds between Jan. 1, 1947, and Feb. 16, 1948. 100 patients.

(C) All those admitted to the wards of a general surgeon between Oct. 1, 1946, and Feb. 10, 1947, and between June 1 and Nov. 1, 1947. 100 patients.

### Method

The aim was to follow up 100 patients in each of the three groups. A date was chosen which would give an average follow-up interval of six months after discharge from hospital. No case was followed up sooner than three months or later than eighteen months after discharge. The names of patients were taken seriatim from the hospital admission list until the number required had been obtained. A circular letter was sent to each patient asking if and when he had returned to work and whether he had gone back to his old job or to a new one. He was invited to call at the hospital if he required any further help from the social service department. Patients who failed to answer or to provide the information required were visited by the almoner. Half the patients replied satisfactorily to the inquiry, about one-third were visited at home, and the remainder came up to see the almoner at hospital. Those who had died either in hospital or after discharge were included in the study to provide a complete picture.

The age distribution of the three groups is shown in Table I. About one-third of each group fell in each quinquennium. The fate of the patients in the three groups after admission to hospital is shown in Table II.

TABLE I.—Age Distribution of the Three Groups

Group	50-54	55-59	60-64	Total
A. Medical .. ..	38	35	29	102
B. Medical .. ..	32	32	36	100
C. Surgical .. ..	36	36	28	100
All groups .. ..	106	103	93	302

TABLE II.—The Fate of the Patients

Group	Total Admitted	Died in Hospital or Between Discharge from Hospital and Follow-up	Not Back at Work	Returned to Light Work	Returned to Old or Similar Work	Untraced
A. Medical	102	47	14	8	29	4
B. Medical	100	30	16	9	38	7
Total medical	202	77 (38.1%)	30 (14.9%)	17 (8.4%)	67 (33.1%)	11 (5.5%)
C. Surgical	100	15	13	6	59	7

### The Medical Cases

Of the medical cases, 38.1% died in hospital or after discharge, 14.9% did not recover sufficiently to resume work, 8.4% were able to return to "light" work, 33.1% resumed their previous employment, and 5.5% were untraced. The results were less good in group A mainly because this group contained more cases of coronary disease (13) than group B (6) and fewer cases of peptic ulcer (8 compared with 23).

*Return to Work in Relation to Diagnosis.*—There was naturally a close relation between the patient's ability to return to work and the nature of the illness from which he suffered. Table III shows the numbers returning to work

TABLE III.—Diagnosis and Fate of the 202 Medical In-patients Aged 50-64

Diagnosis	No.	Died in Hospital or After Discharge	Not Returned to Work	Returned to Light Work	Returned to Old or Similar Job	Untraced
Pulmonary infections (excluding tuberculosis) ..	44	11	6	3	22	2
Peptic ulcer ..	31	2	4	3	19	3
Cancer ..	23	20	2	1		
Coronary artery disease ..	19	12		4	3	
Essential hypertension ..	14	5	4	3	1	1
Nephritis ..	10	7	1		2	
Pulmonary tuberculosis ..	6	3	2	1		
Cerebrovascular accident ..	4	4				
Attempted suicide ..	4	1	2		1	
Psychoneurosis ..	4		1		3	
Rheumatic heart ..	2	1				1
Toxic goitre ..	2	1	1			
Tertiary syphilis ..	2	1			1	
Pernicious anaemia ..	2		1		1	
Miscellaneous (single cases) ..	35	9	6	2	14	4
Total ..	202	77	30	17	67	11

in the different diagnostic categories in groups A and B. Half the 44 cases of pulmonary infections (excluding tuberculosis), 19 of the 31 cases of peptic ulcer, three of the 19 cases of coronary disease, two of the 10 cases of nephritis, and one of the 14 cases of essential hypertension were able to return to their old jobs. None of the 23 cases of cancer or the four cases of cerebrovascular disease got back to full work, although one cancer patient returned to light work.

*Failure to Return to Work.*—Of the 30 patients who did not return to work, one was fit for work but was unable to find suitable employment. The other 29 patients were medically unfit. Of these 29, one had been transferred to the local infirmary, one to a mental hospital, and one was awaiting admission to a sanatorium. Six patients had given up work because of their illness before the exacerbation which led to their admission to hospital.

The most important reason why these 29 patients failed to return to work was that the illnesses from which they suffered were chronic or progressive and their course could not in most cases be reversed or arrested by admission to hospital. As Brown and Carling (1945), in a more general study of the social aspects of hospital medical cases, wrote: "For the majority of the patients the stay in hospital was merely an episode, sometimes a relatively brief episode, in a protracted period of disability and treatment." A secondary reason why some patients failed to return to work was that their usual occupation was too strenuous for all but the physically fit.

The three chief industries in Sheffield and its neighbourhood are steel-making, coal-mining, and the manufacture

of edged tools and cutlery. Much of the work in these industries is arduous and involves considerable muscular effort and exposure to various dusts or great variations in temperature. Furnacemen, foundry workers, metal-grinders, and coal-miners experience mortality rates for bronchitis and pneumonia considerably in excess of that for the general population (Registrar-General, 1938). It is not easy for the elderly Sheffield workman who has been employed in the steel or coal-mining industry and who has been partially disabled by a serious medical illness to find suitable alternative work.

*Return to Light Work.*—Seventeen of the medical patients were able to return to less arduous work than their usual occupation. The diagnosis, previous work, and "light" work obtained in this group are shown in Table IV. It was in

TABLE IV.—*The 17 Medical Patients who Obtained Less Arduous Work*

Age	Diagnosis	Previous Work	Light Work
51	Fibroid, pul. tub., and silicosis	Furnaceman	Light labouring work at old firm
58	Duodenal ulcer	Handling sheet steel on heavy press	Light labouring work at old firm
55	Pneumonia and bronchiectasis	Furnaceman	Painting at old firm
54	Osteoarthritis and emphysema	Steel tester in coal mine	Registered as disabled person. Obtained light work at colliery surface
51	Coronary thrombosis	Government inspector. Much travelling	Sedentary clerical work
64	Arteriosclerosis	Labourer at furnace	Sweeper-up at old firm
51	Diabetes mellitus	Insurance agent. Became unemployed because of illness	New clerical job
54	Essential hypertension	Silver-spinner	Light turner at old firm, sitting down; 9 a.m.-4 p.m., 5-day week
51	Bronchitis and emphysema	Coal-face worker	Surface job at former colliery
59	Duodenal ulcer and pulmonary tuberculosis	Forgeman	Lighter job in timber yard at old firm
59	Essential hypertension	Tram driver	Watchman in tram shed
55	Coronary thrombosis	Insurance traveller	Works timekeeper
60	Bronchial carcinoma	Cutler	Same works, lighter job, 6-hour day
50	Coronary thrombosis	Gas worker	Light labourer, same works
50	Coronary thrombosis	Furnaceman	Light labourer, same works
51	Arteriosclerosis	City policeman	Given lighter duties
62	Essential hypertension	Silver hammerer	Old job, but only 6 hours a day

this group that the almoner was most often able to help the patient in his return to work. The following case histories are illustrative:

A furnaceman, aged 51. Fibroid tuberculosis and silicosis. Unable to do previous work because of breathlessness. Was registered as a disabled person at the Ministry of Labour, and the almoner approached his employer, who eventually found him light labouring work in the steel works.

A silver-spinner, aged 54. Essential hypertension. Could not return to his old job, at which he earned £8 10s. a week, as he was unable to stand for any length of time owing to dizziness and fatigue. He was registered as a disabled person, and the almoner wrote to his employers, who were very co-operative and allowed him to return as a light turner. He was able to sit down to this work, and worked from 9 a.m. to 4 p.m. for five days a week at a wage of £4.

An insurance agent, aged 51. Diabetes mellitus. He was unemployed when the follow-up letter was sent. He was then registered as a disabled person and found temporary clerical work. The disablement rehabilitation officer promised to fit him into a better position as soon as one became vacant, and he was later found permanent employment as a clerk in the Ministry of National Insurance.

*Return to Full Work.*—Sixty-seven of the 202 medical patients were able to return to their previous employment. It is, however, probable that some of these patients—for

example, those who had been admitted to hospital for coronary disease, nephritis, or chronic respiratory disease, and who managed to return to their old jobs—would not be capable of the same occupational effort as before or remain much longer at work.

*Bronchitis, Bronchiectasis, and the Pneumonias.*—Non-tuberculous pulmonary infections constituted the commonest cause of morbidity in the medical group. The 44 cases under this heading included 15 diagnosed as pneumonia or lobar pneumonia, 13 of bronchitis and emphysema, eight of bronchiectasis, five of bronchopneumonia, two of lung abscess, and one of empyema. In a survey of illness in general practice (Pemberton, 1949) "bronchitis" was found to be the commonest complaint diagnosed by a group of Sheffield general practitioners. It accounted for 11% of the 4,814 diagnoses, and in men the frequency steadily increased through working life. The group of illnesses which includes bronchitis, bronchiectasis, and the pneumonias constitute an extremely important cause of morbidity and mortality in elderly men. The aetiology of these conditions is imperfectly understood and in consequence their prevention hardly attempted. There is, however, a high mortality from these conditions in certain occupations which are common in Sheffield, as has been mentioned above, and this may to some extent account for their predominance in the present series.

### The Surgical Cases

Table II shows that 15 of the 100 surgical patients died in hospital or after discharge, 13 failed to get back to work, six obtained "light" work, and 59 went back to their previous employment. Seven were untraced. Table V shows the fate of the surgical cases in relation to diagnosis.

TABLE V.—*Diagnosis and Fate of the 100 Male Surgical Patients Aged 50-64*

Diagnosis	All Cases	Died in Hospital or After Discharge	Not Returned to Work	Returned to Light Work	Returned to Old or Similar Job	Untraced
Hernia	33	1	2	1	26	3
Peptic ulcer	11	2	3	1	5	
Cancer	8	5			1	2
Abscesses	6			1	5	
Haemorrhoids	5		2		3	
Enlarged prostate	4	1			3	
Cholecystitis and gall-stones	4		1	1	1	1
Vesical calculi	3	1			1	1
Fracture	3		1		2	
Intestinal obstruction	3		1	1	1	
Hydrocele	2				2	
Appendicitis	2		1		1	
Anal fistula	2		1		1	
Bronchiectasis	1				1	
Pneumonia	1				1	
Renal calculus	1				1	
Perinephric abscess	1				1	
Miscellaneous	10		1	1	7	
Total	100	15	13	6	59	7

*Return to Previous Employment.*—The surgical patients who were able to return to their previous employment included 26 of the 33 cases operated on for hernia, five of the 11 cases of peptic ulcer, and one of the eight cases of malignant disease. The last-named was a patient with sarcoma of the mesentery who for a time returned to his work as an inspector in the R.S.P.C.A. The high proportion of men operated on for hernia who returned to their old work emphasizes the value of this operation for maintaining and often increasing working capacity. Two of the 15 deaths occurred from medical illnesses—one from pneumonia and one from bronchiectasis—and six of the 13 patients who failed to get back to work were prevented from doing so by illnesses which either were non-surgical or were non-surgical throughout most of their course.

These were two cases of pulmonary tuberculosis, two of peptic ulcer, and two of cardiovascular disease.

*Age and Return to Previous Employment.*—As might be expected, there was a falling off with advancing age in the proportion of patients returning to their previous employment. In the medical cases there was a sharp drop between the 50–54 and 55–59 age groups: in the surgical cases the drop did not occur until the 60–64 period.

### Discussion

The figures which have been given indicate that the majority of these elderly male medical and surgical patients either became fit enough to return to their old jobs or died. There remained two intermediate groups: those who did not become fit enough to return to work (15% of the medical and 13% of the surgical cases), and those who, while not becoming fit enough to resume their old work, were able to undertake less arduous employment (8.5% of the medical and 6% of the surgical cases). In these latter cases the almoner was often able to help by communicating with the previous employer or the labour exchange or a different employer, and explaining the needs and capacity of the patient. It was an advantage if the patient was registered as a disabled person so that he could be included in the legal quota of disabled persons in the factory concerned.

It was difficult to obtain a suitable job for the partially disabled man under a different employer. Usually there was no suitable work or the employer did not want the responsibility of taking on an elderly unfit man. Moreover, the patient usually preferred to return to the occupational environment which he knew and where he was known. He had perhaps spent twenty or thirty years there and could therefore expect sympathetic consideration. Employers in the Sheffield industries have usually, in our experience, taken their disabled employees back and found them less exacting work, although in many cases, owing to the small proportion of light jobs in these industries, it might mean that a workman became almost a "passenger." Of the 17 medical and six surgical patients who obtained lighter work after their discharge from hospital, 18 were taken back by their previous employers.

Beck, Gardner, and Witts (1947), reviewing the social service required for an unselected series of male and female medical in-patients, found that 10% needed assistance in changing their employment and, as we have done, that registration under the Disabled Persons Act and the use of the disablement rehabilitation officer were of value in finding patients suitable employment.

Ministry of Labour Retraining and Rehabilitation Centres and Remploi factories may help to solve the problem of the partially disabled elderly man. This type of patient, however, is unlikely to learn a new craft easily, and his physical condition may seriously deteriorate even before retraining is complete. Industrial rehabilitation for elderly medical patients does not yet appear to have been much developed. Usually, however, it is not a question of only retraining muscles which have become weak and inapt from disuse or of re-creating the desire to work but of employing a man at a much lower level of occupational effort. For this, the Remploi factory seems to offer the best solution. Here, the disabled man can be employed on a permanent basis and the work arranged to suit his capacity.

It is to be hoped that employers of labour on a large scale, whether in State or privately owned industries, will extend still further arrangements for re-employing their elderly partially disabled employees. Such arrangements might

include retraining schemes within an industry, "protected" workshops, shorter hours of work, slower rates of output, and the provision of part-time employment. There are sometimes departments in a factory which because of the nature of the work done could be largely manned by the elderly and less fit. The report on old people published by the Nuffield Foundation (1947) emphasized the value to industry in wartime of the skill and reliability of workmen retained after pensionable age in light but skilled work. We have seen, for example, two old men of 85 and 83 who had been employed at the same silversmiths in Sheffield all their working lives, engaged on repairing silver ware. It is of course not so easy to provide these conditions in heavy industry, where the rate of premature disablement is already high.

### Summary and Conclusions

An unselected series of 202 medical and 100 surgical male in-patients aged 50–64 were followed up for an average of six months after discharge from hospital to see to what extent they were able to return to their previous employment.

Thirty-three per cent. of the medical and 59% of the surgical patients were found to have resumed their previous work. Ability to return to previous employment was most closely related to the type of illness and to a lesser extent to the work normally undertaken.

Eight per cent. of the medical and 6% of the surgical patients were able to return to light work.

The social service required to help elderly men who are partially disabled by chronic or progressive illness to find suitable work and the industrial problems involved are discussed.

Thirty-eight per cent. of the medical and 15% of the surgical patients had died in hospital or before the follow-up.

It is clearly worth while on humane grounds, and also because of the need to conserve the nation's labour force, to arrange suitable working conditions for men who are partially disabled by medical or surgical illness years before the normal end of their working lives. At the same time attention should be given to the probability that some of these disabling illnesses—amongst the cases of chronic respiratory disease, for example—might have been prevented if the patient's working conditions had been healthier from the start.

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The Minister of Health is considering proposals to extend the range of gases and fumes included in the list of "noxious and offensive gases" which are controlled by the provisions of the Alkali, etc., Works Regulations Act, 1906. A draft order has been prepared adding to the list volatile organic sulphur compounds, and fumes containing carbonaceous particles from black production works and fluorine. The order also adds black production works, fluorine works, and acid sludge works to the list of scheduled works liable for registration under the Act, and it extends the range of processes carried out in sulphuric acid works, bisulphite works, and cement production works the carrying out of which renders the works liable for registration under the Act. The draft order is being circulated to interested organizations with a request that any observations should be submitted to the Ministry before July 23, and a public inquiry will be held before the order is confirmed.