employment the man who turns up at the factory gate warm and breathing can be employed, provided that his care has been not only physical, but also social and psychological.

DISCUSSION

F. V. A. Bosc, M.B., CH.B. (*Birmingham*): I have had some experience of the casualty problem from both angles. Before entering general practice I had purely surgical appointments at fifteen hospitals, mostly in Lancashire, in nine of which I did or shared casualty work. I have now been in general practice nine years, and have 3,000 patients. When I compare my accident statistics with those of the recent *National Morbidity Survey*, I find that my figures per thousand patients are quite representative of the national average. For every 1,000 patients at risk I see in a year 100 accidents, of which six come into the general category of major accidents, namely dislocations, fractures of long bones, head injuries, and burns. Thus I have 18 of these cases a year. About eight of these are head injuries, mostly mild concussions, discharged from hospital within 48 hours; only one or two are major fractures or dislocations and some six or seven are burns, mostly minor. The point I am getting at is that of these 18 practically all are back at work in a short time without residual disability, and that only one or two require rehabilitation services. This is the average situation in general practice but it must vary considerably, and we wish to hear those of you in general practice who deal with more than this average and have special problems, those who work in dock or mining areas, and those confronted with the road accident problem literally on their own front doorstep.

In general, the industrially injured are adequately catered for. Those whose rehabilitation is neglected are those outside industry, those self-employed or working for small firms, housewives, and the

aged. I refer, of course, to those areas outside the care of the big hospital centres. Such cases are discharged from hospital, as in the typical case of a man with a fractured pelvis, of whom the R.S.O. writes "I think his recovery is now as complete as it will ever be; the patient is now discharged from our care". This man also had an artificial limb from the First World War, he was aged 56, and he came home practically bedridden, with crutches, a very long time before he was getting about. No question of rehabilitation, no mention of a later resettlement clinic. This question of rehabilitation has become a very specialized subject, and to gain the newer knowledge of it, the general practitioner must turn to the pamphlet issued by the Ministry last year which set out in excellent fashion the essentials of rehabilitation. These services are provided through the disablement resettlement officer, who is at the labour exchange. I would like to add that the disablement resettlement officer does not deal with the aged or with housewives, so obviously there is a gap there. Work is also done by the welfare officer of the county and by various voluntary organizations.

As Mr Osmond Clarke suggested yesterday, the general practitioner of the future must be trained to understand the services available. This is indeed a vital medico-social problem affecting all categories of sick and injured. Essential reading are three books that adequately cover the subject and should be on every general practitioner's bookshelf for reference. One is the official Government book *Services for the Disabled.* Covering all aspects of the general question, the Central Council for the Care of Cripples has published an excellent book called *Disabled Enquire Within* which gives an answer to practically all the questions which might confront a general practitioner. Lastly there is the excellent and useful book *Gadget Leaflets.* Do not for a moment think that gadgets are just gimmicks, they are essential aids for the permanently disabled person; they are not for the temporarily disabled but for the permanently disabled, and they enable the individual to acquire independence in day to day living and work. My final plea is that we should develop a new principle. I feel that all injured patients admitted to every hospital should be followed up, and if they are not back to full working and living capacity within three months after adequate rehabilitation, they should be registered as disabled and dealt with by a mobile rehabilitation social worker. The blind and the psychiatrically disabled enjoy this privilege, so why not the injured, whose only disability is locomotor and who unlike the other disabled, are sound in body and mind? By and large this would cover all the major injuries, except a few non-admitted casualty cases; I am thinking particularly of hand injuries. We would then be on the way to a 100 per cent rehabilitation service for the injured. To sum up, I

would like to point to the essential idea of rehabilitation in a rather negative way; I would say that it is no kindness to cure a patient, and then to leave him a social cripple.

REFERENCES

Services for the Disabled, H.M.S.O., 1955

Disabled? Enquire Within, Central Council for the Care of Cripples, London, 1960

Gadget Leaflets, National Association for the Paralyzed, London, 1960

S. Sevitt, M.SC., F.R.C.P.I., D.P.H. (*Pathologist, Birmingham Accident Hospital*): I am not quite sure why I, as a pathologist, should have been asked to take part in this discussion, because it is true to say that some of my patients do not require rehabilitation. But perhaps being rather an outsider to this sort of matter I may take the advantage of having a bird's eye view of it. The key word " co-operation " has been used by Dr Plewes, and " teamwork " by Dr Logan; to these I would add another word " integration ". But before using this word and explaining what I mean by it, perhaps I may explain what rehabilitation and aftercare mean to me. Rehabilitation is a word of many meanings; in its boldest sense it summons up a picture of the work needed to repair the world-wide problems of social upheaval following the last war. In its narrower meaning it provides the means by which the injured worker passes from hospital to his job, or the injured housewife returns to her domestic duties. In our hospital it means today successful teamwork between departments of physiotherapy, remedial gymnastics, and occupational therapy. Aftercare to my mind has a wider connotation than this conception of rehabilitation, because not only does it include rehabilitation but it also consists of the provision of domiciliary nursing services, the provision of health visitors, the home-helps, and even, if you like, the provision of insurance benefits and financial help of various kinds for those who need them. It also includes the continuation of medical treatment begun in hospital and the taking of special precautions to prevent complications. As an example of the former, there are a great number of patients who are sent home during a course of oral anticoagulant therapy to prevent or treat venous thrombosis, and this requires supervision at home from the laboratories in conjunction with the general practitioner. Examples of the latter are the numerous patients with minor head injury who are admitted for a day or two to hospital and then discharged, and a few of whom return later, perhaps days later, with pneumococcal meningitis. How are we in the National Health Service to provide and care for all these aspects? The problems of the National Health Service involve all three parts of the organization—the hospital service, the general practitioners, and the local authorities—as well as industry, which the National Health Service does not cover. The tripartite structure of the Health Service does not make any

easier the solution of problems simultaneously involving all these three services. Some replanning and rethinking is needed. May I dare to suggest that there should be a single Regional Health Authority, administered by a single Regional Health Board, incorporating and replacing the Regional Hospital Board, the Local Executive Council, and the Local Authority Medical Services, and that the time has come to incorporate into such a service an organization for an industrial medical service? A single structure of regional medicine would provide the organization for the planning of aftercare of the injured population as an entity, as well as having many other advantages. But this is not enough. May I be permitted to suggest that the organization of general practice is antiquated and out of date? It is based largely on single-handed practice, which is the nineteenth century pattern in the twentieth century.

The strength and attraction of modern hospital practice is teamwork, group practice, the division of labour within medicine and between doctors and medical ancillary services. Group practice should be extended in this country; it can be the organizational form whereby the advantage of the division of labour and certain ancillary medical services can be used to their best and finest advantage in general practice. Group practice, I think, is preferably based on health centres. There are many advantages of a health centre from the medical point of view, but in the field of rehabilitation and aftercare it has special advantages.

It is from the health centre that the ancillary domiciliary services can be used, closely linked with the doctors, the health visitors, the home-helps, the domiciliary nurses, and so on. Health centres would also make economic the provision of services to the general practitioner and the injured patient which today press sorely on the overcrowded casualty and rehabilitation departments. I refer to such things as theatres for minor surgery and even the services of physiotherapists.

To sum up, I would suggest that we have to rethink and replan changes in the organization of our National Health Service in order to improve aftercare and rehabilitation. Hospital and general practitioner, local authority and industrial medical services require combination in an integrated Regional Health Authority, with extension of general practice based on group practice—preferably in health centres.

Mr Coltart: I am driven to speak by something Dr Bosc said which interested me greatly. That was his description of the man with a fractured pelvis and the amputation who was sent back as discharged from hospital care. I think that is a way in which we can obtain

better integration between hospital services and general-practitioner services, if general practitioners will help us consultants in charge of these patients to train our registrars and surgical officers. I do not know what Dr Bosc did about that case, but I hope he wrote a letter to the consultant saying. " What is all this about? This man is not really as fit as your R.S.O. says. Will you have a word with this young man and explain to him how to do the thing properly? " If he had done that I am sure, at least I hope, that the consultant would have taken some action, and the young man would have benefited very considerably by that combined action. In one of my own clinics we have rules for the training of these young men. One is that they are never to use the term " light work "; the other is that the patient is not to be discharged as fit for work until he has actually done his job, or a job, for a month. Whether it is his own work or some modified form of employment for which he is fit, he is not to be discharged until he has done it and come back to hospital and reported himself as satisfied with what he has been able to do. The third precaution we take is that if a man is fit for work and we think he ought to be at work but he will not go, we write a letter to his general practitioner in the hope that the patient will not be subjected to this dehabilitation process to which Dr Logan has referred.

Dr Bosc: In answer to Mr Coltart, I would like to say that I found the man with the fractured pelvis designated employment soon after he was ambulant, and he is now working as a lift attendant at Lewis's. I did not refer him back to the hospital, I am afraid. The other question I would like to ask is whether any practitioners in the room have attended resettlement clinics? It would be very interesting to hear this because that was a hope expressed in the Pearcy Report.

J. D. Harte, M.B., B.S., D.C.H. (*Bedford*)*:* I would like to say how stimulating it is to hear this talk about rehabilitation. For a number of years before the war I was an accident claims assessor and I used to see the other side of the picture. Subsequently in general practice I realized how inadequate the general practitioner often is; he does not know what the man's job really is, and he does not know exactly what work the man is doing. Alternative jobs are easy to write down on paper, but what do we mean by alternative jobs? I find it so stimulating to hear Mr Plews' description of the work, especially at Vauxhall's. I saw Vauxhall's about five years ago, and it was one of the most stimulating experiences I have ever had, because there you have not only the doctor but also the engineer, and this is a team which is getting to understand that disability is one thing and handicap is another. A man can have a disability but there need be no handicap whatsoever. I think we have got an example of that in

Leonardo da Vinci who as a man of 45 lost the use of his right arm, and then did some of his best work afterwards with the other hand. That is disability overcome, and the stimulating thing today is that we have here the trend of getting the doctor to understand exactly what the working environment is. As a family doctor I welcome very much the guidance of those who know both the medical side and also the industrial side.

A. Katz, F.R.C.S. (*London*): I have had experience of working in a group general practice and at the same time working on an orthopaedic and fracture unit at two London hospitals. I would like to answer Mr Coltart straight away as to the difficulties of a general practitioner with some experience in fracture work. At one of the local hospitals in the group in which I work in the space of six weeks three fractures were missed by the local casualty officer. One woman had what appeared to be an obvious Colles' fracture, but was sent back the next day with a note, " N.B.I. X-ray—refer back to G.P." This seemed to me quite astonishing, and I telephoned the casualty officer and asked her to have a look at the radiographs again. She went away and came back much later, and said that she had looked at the radiologist's report and he said that there was a Colles' fracture, but she had looked at the radiographs again and could not see it. I feel that whereas long-term planning of accident hospitals and so on is all very well, the immediate problem is the supervision of casualty services of our hospitals. I telephoned the secretary of this hospital, and asked to whom I should speak. I was put through to one of the general surgeons, who said quite simply that the management committee had put the orthopaedic surgeon in charge of the casualty department, and that he had just washed his hands of the whole affair. Here you have this astonishing and appalling situation of casualty officers working without any supervision at all. I think it is about time that consultants and people in charge of casualty departments supervised them, and trained people so that when they do leave casualty they at least know something about casualty work. I believe that in general practice a trainee at the end of his time has to write and say what his training was like, and I feel that some of these committees might well arrange that at the end of the casualty officer's time he reported what training he had actually had and by whom.

A second point that I would like to make is that whereas these committees have so far investigated sites for accident services and first-aid points, I do not know whether as yet they have investigated the possibilities of sites of general practices. Our own which we have built ourselves has a very modern setting, ideally situated,

and could be used in an accident service.

Mr London: I do not really want to say too much about this question of training casualty officers. I would entirely agree with what the last speaker has said. We should train casualty officers, and we should train them carefully, we should take responsibility, but will somebody please let us have some casualty officers to train.

The Chairman: I entirely agree with Dr Leak that when he is called to a disaster, major or minor, the first medical man on the spot should take charge, make a rapid survey and determine what the priorities are; so that when the ambulance arrives he can say, " This patient must go at once and this man can wait ". I do not think that function can be adequately discharged by somebody who arrives on the scene later, no matter how better qualified he may seem to be. Mr London taught us a great deal about the extent of unseen bleeding in a fracture. I know of course that fractures bleed, and also osteotomies bleed, but I had no idea that so much blood was lost in that way, or how necessary it was that it should be replaced; that is a thing that men of my age should be reminded of frequently. I was very much interested in his thesis for the exploration of trivial wounds. We are all aware that in the abdomen, if we see a small stab wound or bullet wound, it has got to be explored because it is not safe to do anything else, but I was very much interested in those pictures he showed of what appeared to be comparatively trivial injuries of joints, the finger, the knee, and so on, in which immediate repair was done, and I should be interested to ask him how those patients are 6 months later. It was a really wonderful survey of the possibilities of modern surgery, if only the general practitioner will send the patient to the surgeon as soon as possible.

Dr Laidlaw put it very well when he said that we must realize that many injuries are emergencies in the true sense of the word.

I agree with people who do not use tourniquets. I really think that the only person qualified to use a tourniquet is a qualified medical man; he should make it his business to go back to the patient in two minutes' time and loosen his tourniquet and see what happens and he should be the only person responsible for that. Having put a tourniquet on, it is the doctor's duty to take it off as soon as he can, and that should not be left to any other person whatever, no matter how well trained he may be in first-aid. Mr Plewes produced this remark which we must take away with us, that the return to work is the most important part of treatment, and he illustrated that extraordinarily well. I like Dr Bosc's suggestion of a disablement register, and I like the old naval differentiation between a disability and a disablement; it is perfectly possible to have many disabilities without having any disablement whatever.