figures, then, although these are clearly presented and dealt with, the conclusions drawn are not based on them directly, but rather on adjusted figures which depend on estimates and assumptions. This being the case, it seems preferable to use a different criterion as well, and to evaluate the conclusions more in terms of the shrewdness with which the authors have handled their imprecise figures. Provided, for example, one does not take the actual numerical survival rates too seriously, it seems reasonable to accept the broad implications of the table which they are used to produce. In this table one finds makers of watches and clocks and of musical instruments, together with workers in precious metals, at one extreme of occupational viability in the mid-sixties; the other end is represented by coal-face workers and railway signalmen. What the present writer finds hard to follow is the reasoning of the authors when they insist repeatedly that these survival rates represent "the proportion who probably could carry on under suitable conditions": it is here that the presence of the original tables becomes more of an embarrassment than a help. Those original figures must by their very nature refer only to the proportion who actually do carry on until their mid-sixties without dying, giving up work altogether, emigrating, or changing their occupation. The transition to the authors' table of comparative survival rates for the 32 selected occupations must therefore be an exercise (of an admittedly high order) in the weighing of other relevant evidence in such a way as to permit the shift from "actually do" to "probably could".

Turning to *New Jobs for Old Workers* we find a similar approach. The authors start with census figures for 16 occupations "of the kind to which men are known or commonly suspected to move in their late middle lives". They then give good reasons why they "must necessarily have recourse to conjecture", and consistently with this, the detailed examinations of the census figures for each occupation regularly contain phrases such as "the figures suggest", "we have the impression", or "there is some probability that". All this must sound like destructive and damaging criticism unless it is made absolutely clear that in the opinion of the reviewer the census information simply does not lend itself to definitive statements: it must be illumined by some such process as that adopted by the authors of these reports. They are not always successful in showing how their rough estimates have been derived logically and computed from the figures in the tables: the reader must often take such a derivation on trust, though like the reviewer he may sometimes baulk. No, these studies must be regarded as brilliantly suggestive interpretations; the association between figures in the table and the final estimate at least serves to ensure that the interpretations will never be wild.

The third report, *The Employment Problems of Elderly Men*, is based on a study of the placing records of 141 labour exchanges during the month October-November, 1954. It is "mainly concerned with an analysis of the transitions" apparently being made by 537 men aged 60 or over who were placed in jobs which could be described as of "a lighter nature". The author, with characteristic responsibility, makes it clear that the men who under

present conditions turn up at labour exchanges are "rarely typical of any branch of industry or any social group". Most of the 537 men were finding their way "either to light labouring jobs in factories or to one or other of the occupations usually reckoned suitable for older men". The author makes the extremely important point that at present little or no effort seems to be made to train older men for alternative work, and he seems justified in his expression of anxiety about the continuing tradition of "old men's jobs". He ends by suggesting "as a working hypothesis that somewhere around 15 or 20% of all men in their early and mid-sixties probably need to be given either the chance of a new job or working conditions better suited to their age", and adds significantly, "Against this yardstick of demand we should have to measure the current supply of lighter jobs available in the country."

These reports (especially the second and third) should be read by every industrial medical officer in the country—and in particular by those who are still caught in the tradition of "old men's jobs".

ALASTAIR HERON

Guiding Principles for the Organization of Occupational Medical Services in Places of Employment. Reprinted from *Occupational Safety and Health*, Vol. V, Nos. 2-3. April-September, 1955. (Pp. 10. 9d.; 15 cents.) Geneva: International Labour Office. 1955.

This publication which, perhaps, is intended for use in countries where the occupational health services are less well developed than in Britain can be read with advantage by any doctor working in industry, or in practice in an industrial area where he comes in contact with some of the problems of the health of work-people.

It lays emphasis on the need for catering for small undertakings, but does not suggest the solution. The present enquiry being undertaken by the Ministry of Labour may throw some light on the needs of smaller industries and how this problem can be solved.

This report draws particular attention to some of the quasi-medical functions of occupational health services which are frequently considered to be no part of the industrial medical officer's job, although his training has equipped him to give this advice. For example, it is extremely difficult to persuade the most enlightened management of the need for consultation with the industrial medical officer at the planning stage of a new factory building or process; too often many factors which, though not always dangerous to health but giving poor working conditions, are only discovered after a new process or factory is in operation. Often elementary knowledge of anatomy and physiology has to be applied to machine and building design.

The need for the industrial physician to have access at all times to all parts of the plant seems too obvious to mention, but the need is equally great for the industrial nurse, and at times, working alone without a medical officer, she may be confined to her surgery and be most unwelcome in the plant.

The section covering first-aid requirements restates the need for standards of proficiency and retraining courses; it is a pity that a definite time limit is not put

upon the period of validity of first aid certificates as this is already one of the great loopholes in the existing legislation in this country. Two years seems to be the longest possible time compatible with reasonable competence.

One of the most valuable measures described in this document is the need for producing an annual report for the management. This exercise in itself affords the industrial medical officer an opportunity of taking stock of his usefulness to the industrial community, and it gives him the satisfaction of knowing that he has achieved something within the preceding 12 months. Its value, perhaps, is greater to him than to the management to whom it is presented. It should contain not only the historical record of what has happened already, but also some commentary on recommendations for the future. Managements today are swamped with statistical information of the day-to-day production problems and have little time to study much of the detail which can go into annual reports. The need is for a brief summary of the main conclusions to be drawn from the figures presented, and one of the difficulties that exists in British industry is lack of any standardized method of recording and analysing this information. Invariably the manager wants to know, "How does my factory compare with similar industries?", and he has always read some other statistics in the daily press (which may indeed be misquoted). This is a great hazard in presenting reports, but it should not deter the medical officer.

The report contains invaluable information for anyone connected with the health problems of an industrial community, and it should be circulated amongst industrialists. It contains, as an appendix, the functions of industrial medical services as described by the American Medical Association, and has a useful bibliography.

J. C. GRAHAM

Psychotherapy and Personality Change. Edited by Carl R. Rogers and Rosalind F. Dymond. (Pp. x + 447. 45s.) London: Cambridge University Press. 1955.

This must surely set a new standard of honesty in reporting research, at least so far as books rather than articles are concerned. Honesty, though always welcome and refreshing, can, however, be naïve; this example is not. The authors and editors are not only mature enough to state clearly the faults of their methods and the limitations of their findings, but also competent enough to know what should have been done had circumstances permitted it. Amidst such evidence of merit, has the book then no faults? Assuredly it has, and of these one of the most serious is its title. What is so fully evaluated in the book is not just "psychotherapy", but rather that particular form of it which is called "client-centred" or "non-directive" therapy. What is described as "personality change" is probably something rather less far-reaching and dramatic than one might imagine.

This is the story of a determined effort to answer the two questions, "Does non-directive psychotherapy cause significant changes in the feelings and behaviour of patients complaining of psychological difficulties?" and "Can these changes be demonstrated in a rigorous and objective manner rather than by appeal solely to

clinical opinion?" If the plain man asks for a definition of non-directive psychotherapy, the simple answer is that it is a method which depends upon the creation of a permissive, uncritical climate in which the patient can feel able to express his difficulties. The counsellor (therapist) refrains from offering advice or interpretations, but rather "feeds back" to the patient a paraphrase of what he has just tried to say. Speaking detachedly, the process may be described as one in which communication is progressively improved, the measure of improvement residing, however, in the patient as the communicating source; he is the "centre" or *locus* of the process. Such a process requires much more skill, patience, and humility from the therapist than is sometimes supposed.

The Counseling Centre of the University of Chicago, where these researches were carried out, "serves both the students of the University and the general public. Most clients are self-referred, although we get referrals from physicians, psychiatrists, clergymen and various community organizations". The Centre avoids accepting a client "who might possibly require institutional treatment" and "lets it be clearly known that they cannot be responsible for medical problems". From this it may reasonably be inferred that the subjects of this attempt to evaluate the non-directive method of psychotherapy were mainly people in psychological difficulties of the minor but often persistent kind so very commonly encountered in the surgeries of general practitioners and industrial medical officers. This makes the findings of greater interest to readers of this *Journal* but of considerably less significance to those dealing with more serious cases of neurotic or psychotic disturbance.

The research design, while representing a considerable improvement on anything hitherto reported, leaves a good deal to be desired, particularly because the ethical exigencies of the situation prevented the investigators from withholding therapy for longer than 60 days in the case of the control group of clients. This becomes serious when it is realized that the "non-wait", or experimental group, remained in therapy for periods varying from a minimum of six weeks to a maximum of about six months. The absence of significant changes in six weeks of waiting cannot be compared with significant changes after six months of therapy so as to permit the conclusion that no spontaneous remission took place: it might have been demonstrable during six months of waiting.

The methods of evaluating change, while again an improvement on anything previously available, still include subjective elements, but the clear and full presentation of the data and the use of various measures in combination do much to meet this criticism. When ratings and judges were used, the "inter-rater" and "inter-judge" correlations were usually commendably high; when this was not so, an adequate and often convincing theoretical argument (not defensive in character) is provided so that the reader may draw his own conclusions.

It would be possible to examine the methods and findings in detail (the reviewer has in fact done so with interest), but this is probably not the place for a mass of technical evaluation and criticism. Suffice to say,