sanatorians, and 70 000 feldshers in industrial medicine.

The training programme of 3½ years follows normal high school, is highly theoretical, and almost conforms to EEC requirements for physician training of 5500 hours. The programme includes basic medical and social sciences, anatomy and physiology, all the paraclinical and laboratory subjects together with clinical medicine, pharmacology, therapeutics, and preventive medicine. 'Scientific atheism' is one of the less conventional subjects from a British standpoint. Practical work is restricted to 16 weeks, but it is clear that experience is rapidly acquired in the field.

Feldshers can be found in every medical setting from primary to intensive care. Feldsher sanatorians fulfil a role midway between the British health visitor and public health inspector. In occupational health the feldsher is responsible for preventive medicine, routine screening, and primary care of the population in his charge. Feldsher health posts are found in undertakings employing 400 to 1000 workers. Where there are a 100 or more workers on night shift, a 24-hour service is provided. Although supported by a physician, the feldsher is clearly in a responsible and often independent position. In primary care, feldshers—particularly in the rural areas—may operate at some distance from medical support and may have a population of up to 3000 to care for. In whichever field he works, the feldsher is sent on frequent refresher courses for periods of a week to three months, and many of these courses are designed to inculcate specific skills on the American model.

As the best example of an established and accepted middle grade medical worker, the feldsher deserves further study. This monograph is an excellent primer.

J. H. WALKER

The Use of Mercury and Alternative Compounds as Seed Dressings: Report of a joint FAO/WHO meeting. Technical Report Series no. 555. World Health Organization, Geneva, 1974. (Pp. 29; Sw.fr. 5). Geneva: WHO. 1974.

The report sets out clearly and simply problems arising from the use of potentially toxic substances as seed dressings and discusses the alternatives. The published literature is extensive and the toxic and other properties of seed dressing compounds have been reviewed by experts of WHO and FAO. For these reasons there is no bibliography, but relevant monographs are included in the list of WHO Technical Reports appended (nos 513, 525, 531, and 545).

The effects of misuse of two types of pesticide, organo-mercury compounds and hexachlorobenzene, used in the

control of fungus diseases of seeds are described. Such seeds may be cereals which form important sources of food for hungry people, and major outbreaks of poisoning affecting many thousands of people have occurred in developing countries where seed intended for planting to ensure healthy high-yield crops has been used instead for food.

The symptoms and signs of poisoning by alkyl (ethyl and methyl) mercury compounds and by hexachlorobenzene are described. Tables 1 and 2 summarize the seed diseases controlled and compare the effectiveness of the insidiously poisonous mercury seed dressings with others which are less toxic. Those pesticides which are less toxic than the alkyl mercury compounds, the benzimidazoles, carbamodithioates and others, tend to control fewer infections and to be more expensive.

The need to substitute seed dressings of low toxicity for the highly-toxic alkyl mercury compounds is recognized in the introduction, and the recommendations include that alkyl mercury compounds and hexachlorobenzene should be used only where there is proven need, and with strict control of application of the pesticide and handling of treated seed. The less toxic alkoxyethyl and phenyl mercury compounds should also be used only when there is no alternative. Education of those responsible for treating and exporting seed and of those receiving it must ensure that it cannot be used as food. It should be distinguished from grain which may be eaten by use of a dye which cannot be removed by washing. In the past poisoning has occurred because the colour has been removed but not the toxic dressing. The addition of a substance which would give a permanent odour or taste, or cause nausea, is discussed but considered impracticable at the present time.

Other recommendations include advice on labelling (in the language or dialect of those receiving the seed), transport, and education in safe use and the dangers of misuse. The report concludes with a discussion of non-chemical methods of plant control which would reduce greatly the need to use highly-toxic seed dressings.

P. L. BIDSTRUP

NOTICE

The British Examining Board in Occupational Hygiene

The 1976 examinations for the awards of Certificate and Diploma in Occupational Hygiene will be held in London on 15-17 November 1976. Applications may be made to the Secretary, Dr D. Turner. The Associated Octel Co. Ltd, Ellesmere Port, Cheshire L65 4HF. The closing date for applications is 30 September 1976.