

The local organization is to be based on hospital meetings, and these will elect the regional committees. The larger regions will have bigger regional committees who, in turn, will appoint a larger number of representatives on the Group Council.

These new arrangements give ample scope for democracy to work. The Hospital Junior Staffs Group Council should be able in future fairly to claim that it represents all hospital junior doctors. Its executive committee is to appoint 12 members of the Central Committee for Hospital Medical Services, and this committee is in future to be responsible, through a Negotiating Subcommittee, for remuneration and all terms of service for all hospital doctors.<sup>2</sup> Three of the Central Committee's nine representatives on the Negotiating Subcommittee are to be hospital junior staff members.

Hospital junior doctors will not only have more opportunity to make their voice heard centrally and round the negotiating table but also more power, and therefore more responsibility, in shaping the future of the hospital services as a whole. It would surely be better for them first to try out their new power alongside their senior colleagues rather than independently of them and, sometimes needlessly, in opposition. The medical profession has enough to contend with without also having contention in its own ranks.

## Segregation of Tuberculous Patients

Removal of patients with infectious pulmonary tuberculosis from their homes in an attempt to protect the family has been generally accepted as a sound preventive measure. This policy now needs reappraisal.

How effective and necessary is segregation of patients receiving modern chemotherapy, which rapidly reduces infectivity? This question has been investigated in Madras by the Tuberculosis Chemotherapy Centre. It has reported a five-year controlled study of the attack rate of tuberculosis among close family contacts of patients with newly diagnosed infectious pulmonary tuberculosis.<sup>1</sup> The contacts lived in poor, overcrowded conditions and all had been living, feeding, and cooking with the patients for at least three months before the diagnosis was made. None of the contacts were given B.C.G. vaccination or chemoprophylaxis. Attack rates were studied in family contacts whose only infectious member was initially the index case. A comparison was made between 272 "sanatorium" family contacts, whose index case was isolated in a sanatorium for one year, and 256 "home" contacts, who remained exposed to the index case during treatment at home. The study covered five years. Both home and sanatorium patients received isoniazid and sodium P.A.S. (sodium para-aminosalicylic acid) for one year. By the end of it in 86% of the home and 92% of the sanatorium patients the disease was bacteriologically quiescent.

During the five years' follow-up tuberculosis developed in 9% of the home and 14% of the sanatorium contacts, including 5% and 7% respectively in the first year. About one-third of the contacts were initially tuberculin-negative.

Among these the attack rate of tuberculosis over the five years was 10% in the home series and 11% in the sanatorium series, including 8.1% and 8.0% respectively in the first year. The corresponding figures for the initially tuberculin-positive contacts were 9% and 16% over the five years and 3% and 7% in the first year. Thus the risk of developing tuberculosis was no greater for the home contacts than it was for the sanatorium contacts either over the whole five-year period or even in the first year.

The sanatorium contacts were exposed to the risk of infection from two sources—firstly, from the patient before the diagnosis of tuberculosis had been made, and, secondly, from other sources in the urban community in which the family lived. The home contacts were exposed to both these risks and in addition to that of continued contact with the patient during home treatment. Exposure to the patient during treatment at home was not an important risk, since the attack rate was similar in the tuberculin-negative contacts in the two groups, while in the tuberculin-positive contacts it was actually higher in the sanatorium group—apparently by chance. The main risk to the contacts seemed to be from exposure to the patient before diagnosis. The continued contact with the patient at home during treatment was little extra hazard.

This demonstration that well-organized domiciliary treatment is practicable, effective, and safe for family contacts is of great importance in developing countries with shortage of sanatorium beds.<sup>2,3</sup> In Britain facilities for domiciliary treatment are good, yet many physicians admit almost all the sputum-positive patients to hospital for several months. This policy can hardly be justified on the grounds of risk to family contacts, for it proved to be unnecessary in the overcrowded conditions of Madras. The risk is likely to be even less in Britain, where patients can often be isolated in their own home. Moreover, B.C.G. vaccination and chemoprophylaxis are freely available for suitable contacts and are known to be effective in preventing tuberculosis.<sup>4,5</sup> It is thus reasonable to conclude that, although there may be several good reasons for treating pulmonary tuberculosis in hospital, admission cannot be regarded as essential to prevent infection of the family contacts of co-operative patients from good homes who can be given well-supervised domiciliary chemotherapy.

## Oedema in Pregnancy

Many clinical interpretations have been put on oedema in pregnancy. The relationship of this physical sign to gain in weight and to pre-eclamptic toxæmia is not fully understood. Nor is it clear to what extent oedema means an increase in the total amount of water in the body or a change in the distribution of water between plasma, tissue fluid, and intracellular fluid.

Since these matters have probably been oversimplified, a recent study by A. M. Thomson, F. E. Hytten, and W. Z. Biliewicz<sup>1</sup> is of special interest. They examined the records of 24,079 women living in Aberdeen who had given birth to single, legitimate babies. From the records they were able to recognize women who had no oedema, those with oedema of the legs only, and those with generalized oedema—that is, elsewhere than in the legs and ankles. They also classified the women as normotensive or hypertensive (diastolic pressure

<sup>1</sup> Kamat, S. R., *et al.*, *Bull. Wld Hlth Org.*, 1966, 34, 517.

<sup>2</sup> Fox, W., *Lancet*, 1962, 2, 413 and 473.

<sup>3</sup> ———, *Brit. med. J.*, 1964, 1, 135.

<sup>4</sup> Medical Research Council, *ibid.*, 1963, 1, 973.

<sup>5</sup> Ferebee, S. H., and Mount, F. W., *Amer. Rev. resp. Dis.*, 1962, 85, 490.