of patients who had never suffered from any of the diseases often considered to be psychosomatic. The group with ulcerative colitis did best in the intelligence test, but their results did not depart significantly from the normal distribution. Personality differences between the ulcerative colitis group and the control group were revealed by significant differences in scores on the Guilford–Martin factor inventory, the results tending to confirm previous descriptions of the ulcerative patients as being passive, insecure, shy, sensitive, and moody.

The article by Drs. F. Feldman, D. Cantor, S. Soll, and W. Bachrach which appears at page 14 of the *B.M.J.* this week must be one of the few psychiatric studies to discount the importance of psychological factors in the aetiology of ulcerative colitis. Its sharp disagreement with most of the conclusions reached by earlier authors is bound to excite controversy, which can hardly fail to be beneficial. The study consisted of a psychological evaluation of 34 patients with ulcerative colitis and a comparison with the general population and also with 74 patients admitted for other gastroenterological conditions. In essence, on the basis of scoring 65 variables, the subjects were placed in five categories of normality or abnormality. The great majority of the patients were classified as "normal" as regards personality and psychiatric illness. In only a small number was there an emotional precipitant closely preceding the first attack of ulcerative colitis. Seven of the patients had undergone extensive psychiatric treatment after the onset of ulcerative colitis. In three of these psychotherapy had helped the patient to adjust to his illness, but in none did it appear to have had any appreciable effect on the course of the disease.

Some support for the iconoclastic view of Feldman and his colleagues comes from the epidemiological study by E. D. Acheson and M. D. Nefzger[10] of ulcerative colitis in the United States Army. They were able to match each case with a control subject of the same rank, age, and sex, and it is interesting that they found no appreciable difference in intelligence, educational attainments, income before enlistment, or military conduct. M. Monk[11] made a study in Baltimore designed to uncover differences in social environment between patients with ulcerative colitis and the population from which they came. She found no differences in educational attainments, amount of life lived with parents or alone, degree of social contact with others before the onset of the illness, or the number of bereavements or marital disagreements in the month preceding the symptoms. However, she did show that the ulcerative colitis group were more likely to have fathers who had died during the patient's childhood. Does this positive finding support the view of J. W. Paulley[12] that "the disease is associated with a well-defined personality not uncommonly related to the unfortunate effect of overpossessive mothers"?

[1] Murray, C. D., *Amer. J. med. Sci.*, 1930, **180**, 239.
[2] Wittkower, E., *Brit. med. J.*, 1938, **2**, 1356.
[3] Engel, G. L., *Psychosomat. Med.*, 1954, **16**, 496.
[4] —— *Amer. J. Med.*, 1954, **16**, 416.
[5] —— ibid., 1955, **19**, 231.
[6] Groen, J., and Bastiaans, J., *Gastroenterology*, 1951, **17**, 344.
[7] Paulley, J. W., *Lancet*, 1956, **2**, 215.
[8] Grace, W. J., Pinsky, R. H., and Wolff, H. G., *Gastroenterology*, 1954, **26**, 462.
[9] Krasner, L., *J. abnorm. soc. Psych.*, 1953, **48**, 10.
[10] Acheson, E. D., and Nefzger, M. D., *Gastroenterology*, 1963, **44**, 7.
[11] Monk, M., Paper read at the First Internat. Congr. Soc. Psychiat., London, 1964.
[12] Paulley, J. W., *Gastroenterology*, 1963, **44**, 7.

Hospital Junior Staff

The wisdom of giving autonomous powers to sectional interests within the B.M.A., which exists to represent the medical profession as a whole, has often been questioned. The exercise of autonomy has on occasions seriously strained intraprofessional relations. Yet to those who possess it the advantages of autonomy have always seemed to outweigh its disadvantages, and under the new B.M.A. constitution, which the Annual Representative Meeting at Bristol next week is likely to approve, the autonomous powers of the committees representing the major branches of medical practice will be strengthened rather than weakened. It is therefore not surprising, nor unreasonable, that there should be renewed demands from hospital junior medical staff for the same rights of self-government as their seniors in established practice have.

However, the wish for autonomy is by no means universal among hospital junior doctors. Some think they would fare no better with it and perhaps less well. The Hospital Junior Staffs Group Council, which represents hospital junior doctors in the B.M.A., is against breaking away from the Central Consultants and Specialists Committee (or, as it will be named, the Committee for Hospital Medical Services), on which junior doctors will in future have twelve representatives instead of four. It is to be hoped, therefore, that the Junior Hospital Doctors' Association, the prime mover in the demand for autonomy, will not press the matter too hard. It would be a pity if this association went so far as to demand the right to negotiate separately on behalf of its members, as its chairman has stated[1] it will in the event of failing to get antonomous powers for hospital junior staff within the B.M.A. That would create an unfortunate division.

It is doubtful whether any organization could completely overcome the problems in representing the interests of a group of doctors so disparate as hospital junior staff. The personal and professional concerns of a middle-aged senior registrar experienced in a specialty and those of a newly fledged, provisionally registered houseman uncommitted for the future are far apart. But both rank as hospital junior staff—as do a British-born registrar intent on becoming a consultant and his colleague from the Commonwealth wanting postgraduate experience. It is difficult to make a convincing case for autonomy for what may be called the "junior" hospital junior staff, whose future may lie in any branch of medicine. Their membership of the hospital population is surely too transient to make it worth while for them to try to create the elaborate and expensive machinery needed for self-government. The more senior among the junior staff are in the main committed to a hospital career, and their interests are as much in what their terms of service are likely to be on promotion as in what they currently are. Their polarity must be towards the top of the ladder.

Last week the Council of the B.M.A. approved the Hospital Junior Staffs Group Council's proposals for reorganizing the constitution of the Group Council itself and of its constituent regional groups. The number of representatives from the regions on the Group Council are to be increased from 42 to 50. The total membership of the Group Council will be 60 instead of 48, and of the 60 only two will be appointed by the Central Consultants and Specialists Committee. Participation in the affairs of the Group is to be open to all hospital junior staff, whether members of the B.M.A. or not.

[1] Briggs, J. H., *World Medicine*, 1967, **2**, 15.
[2] *Brit. med. J. Suppl.*, 1967, **2**, 45.

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.[2] 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.[1] 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.[2,3] 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.[4,5] 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 toxaemia 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. Billewicz[1] 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

[1] Kamat, S. R., *et al.*, *Bull. Wld Hlth Org.*, 1966, **34**, 517.
[2] Fox, W., *Lancet*, 1962, **2**, 413 and 473.
[3] —— *Brit. med. J.*, 1964, **1**, 135.
[4] Medical Research Council, ibid., 1963, **1**, 973.
[5] Ferebee, S. H., and Mount, F. W., *Amer. Rev. resp. Dis.*, 1962, **85**, 490.