changed in content and title to meet the needs of all authorities. This proposal would probably be acceptable to local health authorities, although they might want the new qualification to be substituted for the D.P.H. as a statutory requirement for appointment as a medical officer of health. But there should be no extension of the statutory principle—for example, to appointments at hospital boards—and the way should be left open to recruitment to administration of some people who have had no formal training. These modest changes would be sufficient to ensure that the evolution of the National Health Service is not impeded by differences in training and qualification of administrators. If the structure of the Service comes to be modified the pattern of recruitment and training for medical administration will need to be looked at once again in the light of the new requirements.

Folic-acid Antagonists in Psoriasis

Although psoriasis is usually a benign affliction, its unsightly lesions are apt to cause distress and embarrassment. In Great Britain about a million sufferers from the disease (that is, 2% of the total population) require medical treatment for varying periods, but the true incidence of it in this country (and in others of similar climate and population) may be as high as 10%.[1] The cause of this inherited disorder remains obscure and treatment palliative.

In psoriatic plaques mitotic activity, and so the renewal of epidermal cells, is eight to nine times faster than in normal skin.[2] In an attempt to slow down the rate of cell division folic-acid antagonists have been administered,[3] mainly in the U.S.A., where R. B. Rees and others have treated thousands of patients with aminopterin and methotrexate.[4-6] Alarming toxic reactions were surprisingly few, but these workers warned that signs of systemic toxicity, like oral ulcers, gastro-intestinal disturbances, and depressed blood counts, are danger signals. They reviewed three deaths attributed to treatment with folic-acid antagonists.

In Britain much smaller numbers of patients with psoriasis have received this treatment. Most had it because more conventional treatments had proved inadequate or because they had exfoliative erythroderma. H. R. Vickers and his colleagues at Oxford[7] found that the folic-acid antagonists were consistently effective but not free from side-effects. They reported that "with careful control, which includes discontinuing the drug at the first sign of a possible side-effect, these need not be dangerous and in the early stages they are reversible. The treatment can be discontinued abruptly. This is a great advantage over steroid therapy."

These workers found impaired liver function in all their patients, an observation first reported by R. A. O'Rourke and G. E. Eckert.[8] Reporting on two cases of serious complications (one fatal) at least partly due to methotrexate in ten patients with intractable psoriasis, A. B. Shrank and L. M. Blendis[9] found that "even with adequate supervision this treatment can be very dangerous. The decision to treat a benign dermatosis such as psoriasis with as dangerous a drug as methotrexate must be taken with as much care and consideration as is accorded to the decision to employ systemic steroid therapy."

In order to discover whether methotrexate given to patients with psoriasis has any observable effect on chromosomes T. J. Ryan and colleagues[10 11] at Oxford studied cultures of lymphocytes from the venous blood of eight patients with psoriasis who had received treatment with folic-acid antagonists and eight who had not. Chromosome gaps and breaks, or separated fragments, were seen in 10% of cells in the treated series and in 4% of the controls. In the treated series five cells were found with 47 chromosomes, as well as other abnormalities not present in the controls. As the treated group had a mean age of 47.6 years and the control group of 63.8 years chromosomal abnormality due to ageing could not explain this group difference. The distribution of chromosome defects suggested specific sites of susceptibility in the treated group. Ryan and colleagues suggest that chromosomal damage may be an unavoidable side-effect of folic-acid antagonists. They emphasize that chromatid and chromosome breaks occur in normal persons and that the morphological defects seen in the treated series did not differ obviously in appearance from the controls, but they were disturbed to find cells with abnormalities suggesting that they were the surviving fraction of a larger number of abnormal cells which were not viable. They consider the possibility of the emergence of new potentially neoplastic cells and draw attention to leukaemia having developed in two out of 171 patients treated by Rees and colleagues[6] with folic-acid antagonists and followed up for ten years. One case was diagnosed four years after taking 132 0.5-mg. tablets of aminopterin and the other seven years after taking 48 0.5-mg. tablets of the same drug.

The toxic potential of the folic-acid antagonists probably limits their use to the treatment of diseases endangering life itself. In psoriasis they should be reserved for patients who are severely disabled and who are not responding to any other treatment.

[1] *Trans. St. John's Hosp. derm. Soc.*, 1965, **51**, 106.
[2] Rothberg, S., Crounse, R. G., and Lee, J. L., *J. invest. Derm.*, 1961, **37**, 497.
[3] Gubner, R., August, S., and Ginsberg, V., *Amer. J. med. Sci.*, 1951, **221**, 176.
[4] Rees, R. B., Bennett, J. H., and Bostick, W. L., *Arch. Derm.*, 1955, **72**, 133.
[5] —— —— *J. invest. Derm.*, 1959, **32**, 61.
[6] —— —— Hamlin, E. M., and Maibach, H. I., *Arch. Derm.*, 1964, **90**, 544.
[7] Ryan, T. J., Vickers, H. R., Salem, S. N., Callender, S. T., and Badenoch, J., *Brit. J. Derm.*, 1964, **74**, 555.
[8] O'Rourke, R. A., and Eckert, G. E., *Arch. intern. Med.*, 1964, **113**, 191.
[9] Shrank, A. B., and Blendis, L. M., *Brit. med. J.*, 1965, **2**, 156.
[10] Ryan, T. J., Boddington, M. M., and Spriggs, A. I., *Brit. J. Derm.*, 1965, **77**, 283.
[11] —— —— —— ibid., 1965, **77**, 541.

Professional Secrecy

Lord Moran's book on Sir Winston Churchill[1] is now on sale and can be read, as it should be, as a whole. It is reviewed at page 1341. Its passage to the bookstalls via excerpts serialized in the *Sunday Times*[2] has been accompanied by a sharp public controversy which its author may not have expected but which could scarcely have surprised him. The central issue has been the degree of reticence that a physician should exercise in disclosing to the public private matters learned in the privileged intimacy of the sick-room.

Information gained by a professional man in the course of a relationship with a client is the property of the client. The ethical rule is clear. Information so gained should not be passed on to others without the owner's consent save in certain defined circumstances. Doctors, for example, have a statutory obligation to notify certain infectious diseases. Here the interests of society outweigh those of the patient. Other instances occur in which medical men must on their own responsibility weigh their ethical duty to their patients against another but secondary duty as citizens to prevent harm befalling others. Hippocrates must have had these situations in mind when he defined the things seen or heard in practice (or even outside practice in social intercourse) that ought not to be divulged as those "that ought not to be published abroad."[3] Commonly cited examples of secrets that might be divulged are the case of a nursemaid with gonorrhoea who refuses treatment and the epileptic driver who insists on continuing to drive against his doctor's advice.

The B.M.A.'s ethical rule on professional secrecy is stated in the following paragraph:

> "It is a practitioner's obligation to observe the rule of professional secrecy by refraining from disclosing voluntarily without the consent of the patient (save with statutory sanction) to any third party information which he has learnt in his professional relationship with the patient."

A second paragraph was added by the Representative Body in 1959 as follows:

> "The complications of modern life sometimes create difficulties for the doctor in the application of the principle, and on certain occasions it may be necessary to acquiesce in some modification. Always, however, the overriding consideration must be the adoption of a line of conduct that will benefit the patient, or protect his interests."[4]

This somewhat obscures the issue, because it fails, perhaps intentionally, to give any hint of what complications of modern life the Representative Body had in mind. The General Medical Council,[5] in its booklet on its functions, procedure, and disciplinary jurisdiction, lists "improperly disclosing information obtained in confidence from a patient" as an example of abuse of the relationship between doctor and patient.

It is healthy for a profession to take stock from time to time of its ethical positions. Ethical rules are not immutable. Like the common law and social *mores* they are subject to evolutionary processes in response to the development of the society in which they exist to serve. The Hippocratic Oath has survived largely intact in its application because its guidance is of a kind to attract the loyalty of succeeding generations of thinking medical men. Rules of conduct that do not appeal to the majority will always be disobeyed. The boundary between what is ethical and unethical is often hard to define. Within the ethos of the body professional to which all its members owe allegiance a wide spectrum of conduct is possible, which may range from that which may be unhesitatingly condemned to what may be deplored or merely regretted. On the fringe are matters of etiquette and good taste, which are largely for individual decision though still subject to the judgement of colleagues. But, at a time when both the State and public curiosity obtrude more and more upon the privacy of the citizen, most doctors would be unwilling to countenance any loosening of traditional professional reticence about things seen or heard in the course of medical practice. It would be most unfortunate if Lord Moran's book led the public to think otherwise.

[1] Lord Moran, *Winston Churchill: The Struggle for Survival, 1940–1965*, 1966. Constable, London.
[2] *Sunday Times*, 10 April, 17 April, 24 April, 1 May, 8 May, 15 May, and 22 May 1966.
[3] Jones, W. H. S., *The Doctor's Oath*, 1924. Cambridge University Press. Quoted in *Brit. med. J.*, 1948, **2**, 616.
[4] British Medical Association, *Members Handbook*, 1965, p. 59.
[5] General Medical Council, *Functions, Procedure, and Disciplinary Jurisdiction*, 1966. G.M.C., London.

Immunization Against Poliomyelitis

The incidence of paralytic poliomyelitis in Great Britain has steadily declined since immunization with the inactivated Salk-type vaccine began in 1956, and the decline was faster after the introduction of the Sabin oral poliovaccine in 1962. This trend should continue if a high level of immunization is maintained. Unfortunately it is not being. The Chief Medical Officer of the Ministry of Health has recently drawn attention to this.[1] By the end of 1965 71% of children born in 1963 and 65% of those born in 1964 had been immunized against poliomyelitis. Likewise the Scottish Home and Health Department[2] records that 70% and 64% of infants born in 1963 and 1964 had been immunized by the end of 1965. These rates mean that a substantial number of infants are not being protected. As we know from the experience of Hull in 1961[3] and Blackburn[4] last year, paralytic poliomyelitis can readily reappear in communities where the presence of susceptible, unimmunized individuals permits virus to spread. The effectiveness of poliovaccine is clear from the epidemiological records of countries where mass immunization is practised. From all these countries come reports of a sharp decline in the incidence of paralytic illness. Last year in the United States there were only 59 reported cases of poliomyelitis, of which 34 were paralytic.[5] Of particular significance is the fact that 56% of these were in children of 4 years of age or younger and 59% had received no poliovaccine whatever. The record in Britain has been good, but in the epidemic at Blackburn last year of the 50 reported type I cases 25 were paralytic, and all these patients were either unvaccinated or inadequately vaccinated.[6] Forty-three of the patients were adults. In Sweden and Canada poliomyelitis has been controlled by the large-scale use of potent inactivated vaccines.

In an ideal situation where 100% of the community had been immunized, poliomyelitis would be eradicated. Consequently every effort should be made to get as close to the target as possible. Three points require special emphasis. First, special attention should be placed on the immunization of infants in the first year of life. It should be carried out throughout the year. The second point is to ensure that children are reimmunized at the time of school entry.

[1] C.M.O. 4A/66.
[2] Circular letter from Scottish Home Department, 18 April 1966.
[3] Ministry of Health, *Reports on Public Health and Medical Subjects*, No. 7, 1963. H.M.S.O.
[4] *Brit. med. J.*, 1965, **2**, 542.
[5] *C.D.C. Weekly Reports*, 1966, Vol. 14, No. 52, p. 442.
[6] Ibid., 1965, Vol. 14, No. 35, p. 324.
[7] Standing Medical Advisory Committee of the Ministry of Health, *Active Immunization Against Infectious Diseases*, 1965.