series over many years. The value of such comparisons is therefore extremely doubtful.—I am, etc.,

PATRICIA PRIOR

Department of Social Medicine,
Queen Elizabeth Hospital,
Edgbaston, Birmingham

- 1 Prior, P., Fielding, J. F., Waterhouse, J. A. H., and Cooke, W. T., *Lancet*, 1970, i, 1135.
- 2 Fielding, J. F., Prior, P., Waterhouse, J. A. H., and Cooke, W. T., *Scandinavian Journal of Gastroenterology*, 1972, 7, 3.
- 3 Darke, S. G., Parks, A. G., Grogono, J. L., and Pollock, D. J., *British Journal of Surgery*, 1973, 60, 169.
- 4 Doll, R., Muir, C., and Waterhouse, J. A. H., eds. *Cancer Incidence in Five Continents*, vol. 2. Berlin, Springer, 1970.

Mobile Coronary Care Provided by Ambulance Personnel

SIR,—Dr. J. Ross (27 October, p. 234) is quite correct. The Brighton ambulance men carried out the original pilot scheme without any question of remuneration being mentioned. They said they were not interested in anything except the success of the project.

Unknown to them I got in touch with their trade union, the National Union of Public Employees, at the outset, explained our intentions, and asked them to await our findings. This they did for more than a year. By mutual agreement we then met and settled for an extra payment of £2.15 per week, so increasing the wage bill by £1,900 in 1972, which is not unreasonable as the service is available on a shift basis for every hour of every day in the year. Incidentally, this recognizes the place of the well-trained ambulance man as a paramedical technician.

Without the constructive help of their union I could not have safeguarded the interests of our men. It is the other side of the picture from that of the hairy militants.—I am, etc.,

W. S. PARKER
Medical Officer of Health,
County Borough of Brighton

Brighton

Non-accidental Injury to Children

SIR,—It must surely be time for society to delete from its vocabulary such euphemistic expressions as, "battered baby (or child) syndrome," "non-accidental injury to children," and "child abuse." The legal expression "grievous bodily harm" is, I suggest, sufficient to express accurately the nature of the injuries in cases of assault and battery upon any individual, be he defenceless or not, child or adult. The acceptance of this fact would help to reduce the public complacency which is becoming more apparent every day. It would also ensure that no one section of the community, by privilege of intellect or position, could continually investigate, diagnose, and treat both parties.

In a democracy it is unwise to usurp either the established pattern of consideration by a professional investigator and the Director of Public Prosecutions or the deliberations of a jury and one of H.M. judges. It is the latter who should, where appropriate, initiate and delegate the supervision of the therapy outlined in the report of the Tunbridge Wells Study Group (13 October, p. 96).—I am, etc.,

A. G. GIBSON

Chislehurst, Kent.

Palmerston on Cholera

SIR,—The present pandemic of cholera has awakened interest in the nineteenth century outbreaks which had such a powerful effect on the course of British public health history. The fear generated by the visitation of 1848 did much to stifle opposition to the Public Health Bill of that year, and the resultant Act of 1848 may fairly be said to have been conceived by cholera. Regrettably, the Act was limited to an experimental period of five years, and when in 1853 cholera struck again the Board of Health, born of fear in 1848, was struck down in revenge in 1854.

The Church of Scotland was convinced of the divine origins of cholera and had succeeded in getting that belief enshrined in an Act of Parliament. It was natural, therefore, that when the terrible outbreak of 1853 and 1854 was seen to be heading in the direction of Edinburgh, the Presbytery should petition the Home Secretary, Lord Palmerston, to advise the young Queen Victoria to declare a day of national prayer against the visitation of the cholera. Palmerston's reply¹ is worth quoting in full.

Whitehall, Oct. 19th, 1853

"Sir,

I am directed by Viscount Palmerston to acknowledge the receipt of your letter of the 15th inst., requesting, on behalf of the Presbytery of Edinburgh, to be informed whether it is proposed to appoint a day of national fast, on account of the visitation of the cholera and to state that there can be no doubt that manifestations of humble resignation to the Divine Will, and sincere acknowledgements of human unworthiness, are never more appropriate than when it has pleased providence to afflict mankind with some serve visitation; but it does not appear to Lord Palmerston that a national fast would be suitable to the circumstances at the present moment.

"The Maker of the Universe has established certain laws of nature for the planet in which we live, and the weal or woe of mankind depends upon the observance or neglect of those laws. One of those laws connects health with the absence of those gaseous exhalations which proceed from overcrowded human beings, or from decomposing substances, whether animal or vegetable; and those same laws render sickness the almost inevitable consequence of exposure to those noxious influences. But it has at the same time pleased Providence to place it within the power of man to make such arrangements as will prevent or disperse such exhalations as to render them harmless, and it is the duty of man to attend to those laws of nature and to exert the faculties which Providence has thus given to man for his own welfare.

"The recent visitation of cholera, which has for the moment been mercifully checked, is an awful warning given to the people of this realm that they have too much neglected their duty in this respect, and that those persons with whom it rested to purify towns and cities, and to prevent or remove the causes of disease, have not been sufficiently active in regard to such matters. Lord Palmerston would, therefore, suggest that the best course which the people of this country can pursue to deserve that the further progress of the cholera should be stayed, will be to employ the interval that will elapse between the present time and the

beginning of next spring in planning and executing measures by which those portions of their towns and cities which are inhabited by the poorest classes, and which, from the nature of things, must most need purification and improvement, may be freed from those causes and sources of contagion which, if allowed to remain, will infallibly breed pestilence, and be fruitful in death, in spite of all the prayers and fastings of a united but inactive nation. When man has done his utmost for his own safety, then is the time to invoke the blessing of Heaven to give effect to his exertions.

"I am, sir, your obedient servant.
"HENRY FITZROY."

It is difficult not to feel some sympathy for the Presbytery. Palmerston was never overawed by the Almighty (or anyone else) and his habit of treating God as an equal had irritated the Church of Scotland on previous occasions and was to do so again. Even on his death bed (when few men are at their best), on being asked by a priest if he believed in the redemption of the world through Jesus Christ he replied, "Oh, surely." Less stern critics than the Church of Scotland might have thought such a reply somewhat lacking in piety.—I am, etc.,

GRAHAM DON

London School of Hygiene and Tropical Medicine,
London W.C.1

- 1 Ashley, A. E. M., *Life and Correspondence of Henry John Temple, Viscount Palmerston*, vol. 2, p. 265. London, R. Bentley, 1879.

Mode of Action of Polyene Antibiotics

SIR,—We read Professor E. F. Gale's article "Perspectives in Chemotherapy" (6 October, p. 33) with great interest. We have been working with a number of antimicrobial agents, including the polyene antibiotic candidin, and have been studying potassium efflux using specific ion electrodes. Details of our techniques and some of our results are published elsewhere.^{1,2}

Candidin is 30 times more active against *Candida albicans* than either nystatin or amphotericin,³ though all three of these polyenes appear to share the same mode of action. Our work suggests that destruction of selective permeability by polyenes allows cations to leak out of yeast cells and allows the entry of protons to neutralize the charge so created. This causes internal acidification and death, and in this respect our interpretation of the mode of action of polyenes differs from that of Professor Gale. However, we have also observed a nutritional influence on polyene sensitivity of *C. albicans*, and this may have clinical significance.

The interaction between polyene antibiotics and sterols is well established, and recent studies have indicated that resistance of *C. albicans* to polyenes may be related to qualitative and quantitative alterations in sterol patterns.⁴ However, we have shown that the nutritional status of *C. albicans* influences the amount of sterol produced and

Minimum Inhibitory Concentrations (M.I.C.) of Candidin, Ergosterol Content, and Absorbed Candidin values for *Candida albicans*.

	M.I.C. (μ g/ml)	Ergosterol, (mg/100 mg dry weight of yeast)	Bound ¹⁴ C-candidin (μ g/ 100 mg dry weight)
Grown on alcohol-containing medium ..	0.2	0.77	8.3
Grown on Sabouraud dextrose broth ..	0.01	1.54	12.1
Grown on corn steep liquor/molasses ..	0.005	1.70	15.9

thus the sensitivity of the yeast to polyenes (see table). Changes of the order of a hundredfold in minimum inhibitory concentration are easily achieved with hospital isolates by altering conditions of growth. In yeasts ergosterol is the major sterol in the cytoplasmic membrane. Polyenes bind to ergosterol, disrupting the membrane. The greater the amount of sterol, the greater amount of polyene binding and the greater the sensitivity of the yeast to polyenes.

In a clinical context the relevance of nutritionally induced changes in sterol content become apparent when considering, for example, vaginitis caused by *C. albicans*, as changes in the sterol precursor levels in vaginal fluid during the menstrual cycle could well influence the resistance of *C. albicans* towards polyenes.—We are, etc.,

B. N. KLIGER
S. M. HAMMOND

School of Biological Sciences,
Thames Polytechnique,
London S.E.18

1 Lambert, P., and Hammond, S. M., *Biochemical and Biophysical Research Communications*, 1973, 54, 796.

2 Hammond, S., Lambert, P., and Kliger, B. N., (1973). *Journal of General Microbiology*. In press.

3 Waksman, S. A., Lechevalier, H. A., and Schaffner, C. P., *Bulletin of the World Health Organization*, 1965, 33, 219.

4 Athar, M. A., and Winner, H. I., *Journal of Medical Microbiology*, 1971, 4, 505.

Loud Knocking on the Back Door

SIR,—Mr. J. Squire (20 October, p. 172) takes exception to the advertisement from a consultant surgeon which appealed in an open statement to a dean to allow his son a place at a medical school (6 October, p. liii).

Mr. Squire blithely assumes that "A" level grades provide a valid criterion to forecast the result of six years' training. That Oxbridge have their own entrance examinations implies an appreciation of their inadequacy at least in some quarters. Importance is attached to the interview, so that requirement may be minimal.

I am certain that a background of medicine is valuable to fill in the lacunae that even the most discerning medical education will leave. Thus I deny that success at "A" level and a spell at medical school is solely the way to provide the best doctors.

Where Mr. Squire censures, I only feel sympathy.—I am, etc.,

OLIVER DEARLOVE
Medical Student

St. Bartholomew's Hospital Medical College,
London E.C.1

Lavatory Doors

SIR,—With reference to the letter from Dr. M. D. Begley (29 September, p. 697), some years ago this board's project teams studied the problem that existed where there was a danger of a patient collapsing against an inward-opening door in a cramped compartment and thus the need for emergency outward-opening doors. A solution was sought which would enable such a patient to be given immediate assistance, and various experiments were carried out and the problem solved in the following manner.

The door is fitted with a double-action pivot hinge enabling it to swing both ways. Set into the side of the door-frame, on the

outside of the room, is a metal spring-action door-stop that can be pressed flush into the frame from the outside of the door of the room concerned. Both hinge and door-stop are obtainable from Stanley Works (Building Products) Ltd., Slough, Bucks, the price of each (October 1973) being £10. The "vacant/engaged" indicator bolt is of the type that can easily be unlocked from the outside by turning a coin in a slot provided and this enables the door to be swung outwards for emergency access. The method is simple and can be operated in a few seconds. It is currently used on all building projects in this region and has proved to be very successful.

I am grateful to the regional architect for supplying the foregoing design particulars of how the problem was dealt with and the technical details.—I am, etc.,

S. MACKENZIE
Deputy Senior Administrative Medical Officer,
N.W. Metropolitan Regional Hospital Board
London W.2

Surgery on Day Patients

SIR,—My surgical colleagues and I have been practising "day case surgery" on selected patients for many years. There have never been any problems, and the only people involved have been the surgeon, the patient, and his general practitioner. We have now been bombarded with a Department of Health memorandum (H.M. (73)32) which makes it clear that this simple procedure we have adopted is quite wrong. Before operating on a day patient a whole barrage of complicated arrangements must be put in motion and it is even suggested that a special liaison officer should be appointed.

Surely the whole object of day case operations is to save time, save money, and save personnel. The advice given in the N.H.S. memorandum would appear systematically to defeat all these objects.—I am, etc.,

ROBIN BURKITT

Ashford Hospital
Ashford, Middlesex

The AP Syndrome

SIR,—You recently published a Personal View by myself (13 October, p. 104) in which I described this syndrome.

Dr. L. W. Batten of Edenbridge has drawn my attention to the fact that he reported this syndrome under the name of "Naa-manism" in his book *Health for the Young* published by George Allen and Unwin Ltd., in 1942. From reading his description it is clear that he was referring to the same syndrome and I therefore willingly concede priority to him. I trust that editors of medical dictionaries will please note.—I am, etc.,

J. C. KELSEY
Public Health Laboratory Service Board,
London N.W.9

British Society for Population Studies

SIR,—In 1966 the late Lord Florey, then President of the Royal Society, called together a group of people working in the biological, medical, and social sciences to discuss contributions that their subjects could make

to the study of human population problems. This group has continued to meet since that date. Its members now feel that with the recent upsurge of interest in population problems there is need for a more widely based society in which these interdisciplinary discussions can continue and have accordingly decided to set up a British Society for Population Studies, the object of which would be to continue and expand the scientific study of population questions. Membership of the society will be open to all persons with a scientific interest in the study of human population problems, whatever their background discipline may be. We would be grateful if those interested in learning more about the society and becoming members would write to the Secretary for further information at the address below.—I am, etc.,

E. GREBENIK
Secretary,
British Society for Population Studies

c/o Population Investigation Committee at the
London School of Economics and Political Science,
Houghton Street, Aldwych,
London WC2A 2AE

Medical Officers' Prospects

SIR,—Your leading article concerning medical officers in the armed Forces (3 November, p. 247) suggests that we are to receive £65 less than our civilian colleagues as a result of the recent report¹ because we were overpaid last time. Rather it is because general practitioners were underpaid by £65 in 1972-3, as the earlier Review Body report² made clear. I wonder how many G.P.s have realized it.

There are other anomalies in the report—apart, that is, from the unconscionable and unexplained delay in its production which has cost us dearly in terms of devaluation. General practitioners were awarded £240 instead of £250 on the grounds that they would make up the £10 from other sources. The report acknowledges that pay from other sources is not available to us and therefore gives us the £10. In so doing it acknowledges that general practitioners' pay from all sources should be the analogue on which our pay is based. It then bases the award solely on pay from executive councils—plus £10.

The pay scales are also founded on the assumption that the average medical officer will be promoted to colonel (or equivalent). Is this assumption reasonable? Even if this is accepted, the scale gives an average annual military salary of £5,728.18p over a 32-year career. This is still £31.82p short of the £5,760 which is the figure stated in the report.

The Armed Forces Committee of the B.M.A. meets on 13 November to consider the report, the Jarrett Report,³ and other important matters. Medical officers are not normally vociferous, or even active, in B.M.A. affairs, but the committee is there to serve them and would welcome their opinions.—I am, etc.,

DAVID S. WRIGHT

Gosport, Hants

1 Review Body on Armed Forces Pay, *Supplement to Second Report*, Cmnd 545. London, H.M.S.O., 1973.

2 Review Body on Doctors' and Dentists' Remuneration, *Third Report*, Cmnd 5353. London, H.M.S.O., 1973.

3 Ministry of Defence, *Report of the Defence Medical Services Inquiry Committee*. London, H.M.S.O., 1973.