This cooking temperature could not be relied on to destroy the spores of *Clostridium perfringens*. Prevention of food poisoning by *C. perfringens* must be by rapid cooling of the bird after cooking to a temperature at which this organism will not grow. It is also, of course, necessary to prevent recontamination of the cooked bird with salmonellae derived from raw meat or poultry, as explained in the letter from Dr Diane Roberts, and others (16 December, p 1708).

The Birmingham work was a deliberate study of internal temperatures achieved by turkeys during cooking. Previous advice has been based largely on guesswork and therefore has always had to err on the side of safety.

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¹ Fereday, P B, and Bates, M P, *Environmental Health*, 1978, 86, 77.

Action on alcohol

SIR,—Professor R E Kendell's fascinating survey (10 February, p 367) frequently shows one side of the coin only. For example, most therapists openly admit their debt to and co-operation with "laymen,"—that is, Alcoholics Anonymous.¹ There may indeed be "little evidence to substantiate" AA's effectiveness (from research as distinct from clinical impressions); but "the consistent refusal of AA branches to keep any records" is aimed, of course, at protecting members' anonymity; many patients attend only after having been assured by their doctor of this anonymity.

Most clinicians interested in the problem do not believe in a "crucial difference" in psychological make-up or metabolism between alcoholics and others; they accept that there is no such person as "the alcoholic," and that probably everyone, including the so-called "normal" person, could become an alcoholic.^{1 2} How much and for how long a person drinks may indeed determine whether he becomes physically dependent; but then very often the reasons for his so doing may be due to personality features as well as to social and cultural circumstances.^{1 2} It is true that "our efforts to combat alcoholism are going badly"; but, as yet, society as a whole (not excluding doctors and politicians) has made few such efforts.

Professor Kendell repeats the frequently heard allegation of "judicious choice" of the motivated and stable patient by "most treatment programmes," which is certainly not true of most of the programmes I have known; but he himself "proves" his argument by selecting his evidence without giving us the other side—for example, the conclusion that "outpatient treatment [is] just as effective as inpatient . . ." was based on a relatively small trial (20 inpatients and 20 outpatients)³ and is by no means generally accepted⁴; every clinician surely sees many people who cannot possibly be treated as outpatients.

Professor Kendell's "judicious choice" is even clearer in "the most damning evidence of all": the sample of married men still living with their wives, voluntarily attending a clinic, and spending three hours in assessment⁵ anyway have a better prognosis than any other possible sample of drinkers, such as single or divorced women (or men), not

motivated or prepared to present themselves for even the briefest assessment.^{6 7}

Professor Kendell attacks the "disease concept"⁸ for various reasons, but far from denying the drinker's all-important responsibility this concept forces him, on the contrary, to co-operate closely with treatment; it does not imply that alcoholism is the exclusive responsibility of doctors, or the need to correct the fault. The multifactorial disease concept of alcoholism⁹ accepts the importance of emotional and social as well as physical factors, the disorder requiring a multidisciplinary approach (including education, research, treatment, and rehabilitation) by a team of professional and voluntary agencies and certainly not by the doctor alone.^{1 3} It is, in fact, the protagonists of the disease concept, such as Dr Norman Kerr (who in 1884 founded the Society for the Study of Addiction) and Jellinek,⁸ who pioneered efforts of professional and public education in the field.

Everyone interested in alcoholism acknowledges the vital contribution of the law; but, like doctors, politicians alone will not solve the problem either (as reflected, for example, in the highly restrictive 1736 Act in England or in prohibition elsewhere). If a "major government-financed campaign . . ." were to be mounted, "... a decade or more will be needed to achieve . . ." its aims; whose responsibilities are the casualties arising meanwhile and in the future? The statement that "the medical and caring professions are incapable of dealing effectively with the harm and suffering caused by alcoholism . . ." is highly misleading. Much can, and is, in fact, being done.

Professor Kendell believes that alcoholism is a political problem. Many may feel, however, that, as so often with alcoholism, the answer is not one of "either . . . or": "action on alcohol is everyone's business" (10 February, p 361). Politicians will not move without being continually prodded by society, and it is largely up to doctors to show society the way. It is reassuring that Professor Kendell, after a complex detour, confirms this conclusion in his last sentence.

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¹ Glatt, M M, *Alcoholism—A Social Disease*. London, Teach Yourself Books, 1975.

² Glatt, M M, *A Guide to Addiction and its Treatment*. Lancaster, Medical and Technical Publishing, 1974.

³ Edwards, G, and Guthrie, S, *Lancet*, 1967, 1, 555.

⁴ Glatt, M M, *Lancet*, 1967, 1, 791.

⁵ Edwards, G, et al, *Journal of Studies on Alcohol*, 1977, 38, 1004.

⁶ Glatt, M M, *Lancet*, 1977, 2, 817.

⁷ Glatt, M M, in *Alcohol and the Family*, p 24. London, United Kingdom Alliance, 1977.

⁸ Jellinek, E M, *The Disease Concept of Alcoholism*. New Haven, Connecticut, College and University Press, 1960.

⁹ Van Dijk, W K, in *Alcoholism: A Medical Profile*, p 133. London, Medical Council on Alcoholism, 1973.

SIR,—It was refreshing to read Dr D A Roche's letter (24 February, p 547) suggesting that soft drinks as well as alcoholic drink should be offered at professional functions.

Working in an accident and emergency department, I long ago became nauseated by the results of alcoholic drink. Pub brawls, street fights, unprovoked assaults, battered wives, and alcoholic vagrants are all regular alcohol-associated features in any accident and emergency department's case load—quite apart

from the constant flow of injuries caused by alcoholic car drivers. Caring for these patients turned me into a teetotaler years ago and I now always take pleasure in asking for a soft drink at any medical function.

On several occasions I have had to treat members of the medical profession who have been injured as a result of drinking alcohol. I have been pleased to help them but I am frequently bemused by their method of showing their appreciation—sending me bottles of alcoholic drink. It is hard to imagine a more incongruous means of expressing gratitude. In view of the recent rapid rise in the consumption of alcohol in Britain, it is to be hoped that the medical profession as a whole will accept the lead given by the Royal College of Psychiatrists in taking a fresh look at the use of alcohol in our society.

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Manic states in affective disorders of childhood and adolescence

SIR,—Your leading article (27 January, p 214) should not go unchallenged. Anthony and Scott¹ are quoted in regard to characteristic features of manic illness, which, on such criteria, is extremely rare. Apart from this the whole range of childhood and adolescent psychiatric symptomatology is offered along with hyperactivity and depression, leading on to quoting authors² who have treated 190 adolescents and children aged 3-19 with lithium carbonate. Details are given for only one-quarter of these cases, and the usual two-thirds response is claimed. You go on to recommend a trial of lithium carbonate.

In a professional lifetime of child and adolescent psychiatry in clinics and in hospital I have never seen a case of manic-depressive illness in a child, although I accept it may rarely exist. Manic behaviour or hyperactivity and also depression are common, but invariably respond to environmental changes, family work, and psychotherapy.

Lithium carbonate is acknowledged as a highly toxic drug, the use of which is only justified in carefully selected adults. Your encouragement of its use in adolescents and children even as young as 3 years of age, suffering from behaviour disorders and affective disturbances, which are almost always attributable to circumstances, is strongly to be deprecated.

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¹ Anthony, J, and Scott, P, *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 1960, 1, 53.

² Youngerman, J, and Canino, I, *Archives of General Psychiatry*, 1978, 35, 216.

*.*All effective medicines, from aspirin to morphia, are toxic if used inappropriately. Affective disorders in children are overlooked because the importance of the constellations of symptoms is not recognised. They have been described by several workers and in essence resemble adult conditions. The persistence of symptoms of behavioural disturbance with constantly lowered or elated mood at any age interferes with the individual's autonomy and prevents him developing and expressing himself. This is a pathological state, the fixed

mood distorting his experience and behaviour; and where effective medication is known it cannot responsibly be withheld.

Psychotherapeutic support is always needed by the child and his family but by itself leads to the danger that the child will merely adapt to his illness and circumstances, and only appear to improve. The aim of treatment must be to restore him fully to his previous personality, perhaps of many years ago.—ED, *BMJ*.

SIR,—There is one particular area I would like to comment on regarding your otherwise comprehensive leading article (27 January, p 214) on this topic—namely, side effects of lithium therapy in the young. Some special precautions are necessary because of the vulnerability of the age group under consideration. The narrow margin between the therapeutic and toxic levels of lithium in the serum is well known, and side effects such as abdominal pain, vomiting, tremors, and drowsiness when they occur in the young could be particularly distressing. Hence not only must the parent have easy access to the therapist when toxic effects appear, but the young person should be seen by the therapist at more frequent intervals than adults. The suppressant action of lithium on the thyroid has been established. Although pre-existing renal dysfunction is a contraindication of lithium therapy, whether lithium itself causes renal damage is not clear and is currently under investigation. It is also now known that lithium affects calcium metabolism. Hence it is clear that lithium therapy in the young should be carried out with extreme caution.

The Federal Drug Administration cautions against the use of lithium in children under 12. Lithium thus should not be used in this group unless there are special indications. The special implications and precautions necessary regarding side effects of lithium therapy with young people have recently been described.¹⁻³ For the past three years a double-blind controlled investigation sponsored by the South-east Thames Regional Health Authority has been carried out in this hospital.⁴ More detailed accounts of this work are in preparation and I will be quite happy to provide details for anyone who is interested.

Proteinuria, although not an established side effect of lithium therapy in adults, has occurred with disturbing frequency in our group of children. Two other side effects which need to be emphasised are the occurrence of memory impairment and fine tremors of the hands which affect the handwriting. The implications of these two side effects for a child at school are obvious.

I would like to endorse one of the indications for lithium therapy in young people referred to in your leader—aggressive behaviour. However, I would qualify this by saying that this should be hyperaggressive behaviour occurring in an adolescent over 12 not amenable to other intense psychological methods of intervention (family group therapy, behaviour modification, etc.). In these circumstances short-term lithium therapy for up to six months could be beneficial.^{2,3} Long-term lithium therapy in the young should be avoided. There is some evidence that the anti-aggressive action of lithium probably requires a lower dose and lower serum concentration than those recommended—namely, 0.6-1.5 mmol(mEq)/l.³ Lithium, when given to young people, should be given in a sustained release preparation—because then there is less peaking

of the serum lithium level and hence the potential for renal damage is decreased.

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¹ Lena, B, *Excerpta Medica, International Congress Series*, in press.

² Lena, B, paper presented to quarterly meeting of the Royal College of Psychiatrists, London, 1978.

³ Lena, B, in Symposium on the Psychopharmacology of Aggression, Royal Society, London, 1978 (proceedings to be published by Raven Press).

⁴ Lena, B, Surtees, S J, and Maggs, R, in *Lithium in Medical Practice*, p 79-83 ed F N Johnson, and S Johnson, p 79. Lancaster, Medical and Technical Publishing Press, 1978.

Is there a hyperkinetic syndrome?

SIR,—Whatever the merits of the "hyperkinetic syndrome" one has to accept that hyperactive children present a real problem and one which is often referred to child psychiatrists for treatment. It may well be that hyperactivity, a most striking symptom, is a child's common response to a number of separate clinical and aetiological entities.

In my practice I have found it useful to look at hyperactivity as a psychomotor manifestation akin to the psychomotor acceleration of adult hypomania. Dynamically, one can consider adult motor acceleration to be a manic defence against depression. Depression in children does not present itself in the adult pattern. For one thing, the motor control and the psychic developments are incomplete. Psychic awareness of depression by the child generally begins in adolescence. However, many of the other symptoms of adult depression are present in conjunction with the child's psychomotor acceleration. I have often found in the history a disturbance in the mother-child relationship dating back to the time of birth, the infant not seeming to respond satisfactorily to maternal care (depressed infant?) or maternal care being clumsy or otherwise unsatisfactory to the infant (maternal depression often present). The fact that children in the United States respond to psychic stimulants such as dexamphetamine and methylphenidate is, in my opinion, not a "paradoxical response" but rather the response which one would usually expect from depressed adults after intake of the very same psychic stimulants.

Haloperidol (plus orphenadrine) is probably the most effective drug in controlling the child's motor acceleration but it does not affect favourably the psychic depressive component in the syndrome. The administration of a tricyclic antidepressant by itself or together with the haloperidol appears to be much more effective and certainly a more rational treatment. Appropriate drug treatment for the mother should also be considered. Family therapy and psychotherapy focusing on the mother-child relationship, both present and past, is an invaluable aid.

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SIR,—The notion of the medical model for defining diagnosis expressed in your leading article of 24 February (p 506), is false. You state that the medical model is based on "bacterial infections with distinctive symptoms and signs, predictable course and outcome, and a relatively consistent response to treatment—and all backed up with positive cultures." To equate the medical model with somatic patho-

logy alone greatly limits the concept; the medical model embraces psychopathology as well as somatic pathology.

Had the correct model been employed in evaluating the authenticity of the "hyperkinetic syndrome" it would soon have become apparent that hyperkinesis is a symptom rather than a syndrome and in a particular patient represents somatic pathology or psychopathology, or an interaction of both; indeed the data given in your editorial point clearly in this direction.

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Labetalol and urinary catecholamines

SIR,—We have already reported (24-31 December 1977, p 1673) that elevated levels of urinary catecholamines occur after the administration of labetalol. Further reports have been published in this journal which indicate that when radioenzymatic detection methods are used for the measurement of catecholamines, then normal levels are observed after labetalol administration by Dr C A Hamilton and others (16 September, p 800) and by Dr R Kolloch and others (27 January, p 268). This is in contrast with the finding that conspicuously elevated levels occur when fluorimetric method measurements are used, as reported by the same authors.

We have shown that no significant elevation of plasma noradrenaline or adrenaline occurs after acute intravenous administration of labetalol.¹ Measurement of catecholamines was performed using the high-performance liquid chromatography (HPLC) method of Riggan and Kissinger² and our results are similar to those already reported.² Further extensive studies in our laboratories have shown that when fluorimetric methods of catecholamine measurement are used elevated levels do occur after the use of labetalol. Thus we can confirm that labetalol in biological fluids interferes with fluorimetric methods of analysis but that no such interference occurs when HPLC methods are used.

It is therefore important not to attribute clinical significance to elevated plasma or urinary catecholamine levels if these measurements have been made using fluorimetric methods. Furthermore, we recommend that urinary 4-hydroxy-3-methoxymandelic acid (HMA) and not catecholamine or metanephrine excretion should be measured when screening for pheochromocytoma in patients who are being treated with labetalol.

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¹ Richards, D A, Prichard, B N C, and Hernandez, R, *British Journal of Clinical Pharmacology*, 1979, in press.

² Riggan, M, and Kissinger, T, *Annals of Chemistry*, 1977, 49, 2109.

No more textbooks on primary care?

SIR,—I agree with Dr Ian Tait (27 January, p 256) in praying for no more textbooks on general practice. A book which covered everything the GP ought to know would prove a daunting load for a strong man with a