urgent need of home for diagnostic, protective, or therapeutic reasons places in existing children's hospitals, or in hostels or other primarily non-medical child-care settings, may be more suitable than admission to a special school or unit, where, despite the fact that the majority of children rapidly become evidently less disturbed in their behaviour, the duration of stay may be as long as four years.\\n
Economic factors are in any case likely to slow the further growth of special units, and the competing demands for medical manpower make it unlikely that enough doctors of sufficient skill and experience will be available to staff a comprehensive child psychiatric service. Teachers and child-care and probation officers, and others directly concerned with child care, must continue to carry a considerable share of the management of disturbed children. Their training in the recognition and management of emotional disorders is improving, but their greatest need is for continuing consultation, guidance, and support in the management of their cases. Family doctors more than anyone have the opportunity to know families over many years and may be able to intervene before the development of overt disorder or to offer guidance in minimizing the effects of adverse situations. Unfortunately undergraduate and postgraduate education does little at present to equip the doctor for these tasks. Paediatricians and school medical officers are also more likely to see disturbed children than the specialized psychiatric services, but are often reluctant to attempt to deal with these problems because of their uncertainty about their own capacity to offer effective treatment and because of lack of available psychiatric consultation. Psychiatrists practising in clinics for adult patients are often untutored in the problems of childhood and adolescence, and when already involved with a family situation prefer to refer the younger members to a colleague working in another setting.

In these circumstances it would seem that child psychiatrists have an enormous responsibility for education and consultation. Perhaps they should sacrifice some of the pressures and satisfactions of individual therapy and spend more time giving training, consultation, and support to colleagues, both medical and non-medical, who are providing individual and family care in the community. At the same time they must try to ensure that adequate resources are invested in research. As well as including study of the origins and development of children's disorders, this should be aimed at evaluating the consequences of different forms of treatment.

Our present child psychiatric services are so rudimentary that the buildings and staffing patterns of the next decade may mould the development of services for the next century.

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2. Ministry of Health, H.M. (64) 4. H.M.S.O.

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Which Hypotensive Drug?

Hypotensive treatment improves the prospects of patients with severe hypertension, and it is thought possible that the degree of benefit is related to the effectiveness of control of the blood pressure.

Now that many hypotensive drugs are available, and more appear every year, it becomes increasingly difficult to decide which drug should be given to any patient. Indeed, the multiplication of remedies means that no single one is entirely satisfactory. Side-effects and other hazards must always be balanced against possible benefits.

The drugs used will depend in part on the patient’s condition. In hypertensive emergencies, such as encephalopathy or left ventricular failure, the blood pressure must be reduced rapidly. For this purpose parenteral hexethamethionium or pentolinium may be given, provided the patient is either sitting up or tilted feet downwards. Intramuscular reserpine or intravenous frusemid or ethacrynic acid may likewise be employed unless there is reason to believe that the patient has obstructive disease of the urinary tract or severe renal failure. Parenteral treatment with methyldopa has been advocated, but it can occasionally cause a transient rise of arterial pressure and is probably better avoided. Patients requiring this kind of treatment will almost invariably need continuous control of their blood pressure thereafter unless the emergency is due to a self-limiting condition such as acute glomerulonephritis.

The drug chosen for maintenance treatment of hypertension will also depend to some extent on the patient’s state. Patients with severe or malignant hypertension will usually require one of the more potent sympathetic blocking agents, while the blood pressure of patients with milder disease can often be controlled with drugs that require less meticulous attention to dosage. Phenobarbitone has no place in the treatment of hypertension. A thiazide type of diuretic is usually the first choice for patients with mild hypertension provided there is no risk from gout or diabetes. There is no evidence that any single diuretic is superior to the others in respect of efficacy or freedom from side-effects. There is little point in increasing the dose if adequate control of the blood pressure is not achieved. Potassium supplements will be required, particularly if the patient is receiving digitalis. If adequate control is not obtained, it is probably reasonable to add small doses of a rauwolfia alkaloid. This combination is usually more effective than a diuretic alone, though the rauwolfia alkaloid may cause depression or retention of sodium. There is again no unequivocal evidence that one rauwolfia compound is superior to the others. One major advantage of diuretics and rauwolfia compounds is that they do not cause postural hypotension. The same is true of propranolol, which has a moderate hypotensive action. It may, however, cause cardiac failure, and its place in the routine treatment of hypertension is not yet established.

If the above drugs fail to control the blood pressure, or if the patient has severe hypertension, one of the agents affecting
sympathetic efferent function should be given. These comprise the ganglion-blocking agents, of which only mecamylamine and pempidine are now used in any quantity, methyl- 
dopa, and the drugs which block sympathetic fibres at the 
neuro-effector junction—bretylum, guanethidine, bethan-
didine, guanoxan, guanoclor, and debrisoquine. Pargyline has 
an effect similar to these drugs on arterial pressure, 8 but 
should not usually be prescribed for the maintenance treat-
ment of hypertensive patients because it is a monoa-
mine-oxidase inhibitor, and patients receiving drugs of this 
type may suffer dangerous reactions after some other drugs 
or foods. The ganglion-blocking drugs affect parasympathetic 
as well as sympathetic functions and thus may cause addi-
tional side-effects. Few people would now consider the 
first choice for the treatment of severe hypertension, 
though they may be very useful if other drugs fail. Bretylum 
has now fallen into disfavour because many patients become 
tolerant of its hypertensive effects.

In the B.M.J. this week Dr. V. Vejlsgaard and his 
colleagues report a double-blind comparison of four drugs— 
namely, guanethidine, methyl dopa, guanoxan, and guanoclor. 
Most studies of different ganglion-blocking agents have 
concentrated on the severity of postural hypotension, and 
the incidence of side-effects over a relatively short period of 
time. The present workers found methyl dopa the most satisfactory 
in these respects. In a similar comparison between methyl-
dopa, guanethidine, and pargyline 9 the same conclusion 
was reached, though there was much variation between patients. 
About two-thirds of the patients were better controlled by 
methyl dopa than either of the other drugs, but one-third of 
them did better on one of the other agents. This merely 
underlines the fact that no ideal drug exists. Vejlsgaard and 
his associates have shown convincingly that guanoclor is a 
difficult drug to use for the maintenance treatment of hyper-
tension, and it seems unwise to employ it unless others fail 
to give satisfactory results. Though guanoxan performed 
fairly well in their hands, impaired liver function has now 
been observed in many patients receiving it, 9-10 and it may be 
given to it too only if other agents fail.

This leaves methyl dopa, guanethidine, bethanidine, and 
debrisoquine. The last two have not been formally com-
pared with other drugs, but of the first two methyl dopa 
appears to have a marginal advantage. 11 However, it also 
has some drawbacks. Between 10% and 30% of patients 
receiving long-term treatment develop a positive reaction to 
the Coombs test, and a small proportion of these have haemo-
lytic anaemia. 12 There is also a risk of drug fever and liver 
damage. 13 In some patients it is impossible to control the 
blood pressure with methyl dopa, even in combination with a 
diuretic. Many different remedies will need to be tried in 
difficult cases, and sometimes a combination of two sym-
pathetic blocking agents will give better results than a single 
one. 14 Good results depend to a great extent on the care with 
which the regimen is managed: this is usually more impor-
tant than the initial choice of drug.

Rubidomycin in Acute Leukaemia

Rubidomycin is the first antibiotic to show therapeutic effect 
in management of acute leukaemia in man. It is produced 
from a strain of Streptomyces coeruleorubidus, and it is active 
in all forms of acute leukaemia. J. Bernard and his 
colleagues, 1 in an extensive clinical trial, have found it useful 
in the treatment of acute lymphoblastic leukaemia and have 
also been able to obtain remission in more than half their 
patients with acute myeloblastic leukaemia. This is the first 
time that the use of one drug alone has resulted in such a 
satisfactory remission rate in acute myeloblastic leukaemia, 
and the duration of the remissions appears to be at least 
several months.

Several schedules for the administration of rubidomycin 
are being tried, and it is not yet possible to define the most 
satisfactory method. It is now agreed, however, that remis-

sions should be induced by the shortest possible course and that 
maintenance therapy is contraindicated because of the drug's 
toxic effects on the heart. Remissions may be induced by the 
intravenous administration of the drug dissolved in saline and 
injected into a fast-flowing infusion. The injection is given 
daily in a dose of 1 to 2 mg. per kilogram body weight per 
day, the length of the course depending on how well it is 
tolerated. The maximum dose that should be given is about 
20 mg. per kilogram body weight, the average dose before 
side-effects are encountered being 6 to 10 mg. per kilogram.

So far the major complications encountered have been 
cardiotoxicity and bone-marrow aplasia. Toxic effects on 
the heart first show themselves by tachycardia, which leads 
rapidly to pulmonary oedema and death. Death from 
myocardial degeneration induced by rubidomycin has occurred 
in about 10% of patients treated so far. 15 The onset of this 
complication does not appear to be preceded by 
electrocardiographic abnormalities, and heart failure when it 
occurs is of sudden onset and intractable. Its occurrence is 
related to the total dose given and has been seen in patients 
given maintenance therapy or when a large dose was required 

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