For Debate . . .

On the promotion of non-drug treatments

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"I've been house bound for 10 years. When I used to panic doctors would give me Valium. Why didn't they know about this type of treatment?"—37 YEAR OLD HOUSEWIFE BEING TREATED FOR AGORAPHOBIA

"This is the second time I've been told I can't be promoted because of my stutter. My doctor didn't know that effective treatment was available."—29 YEAR OLD GRADUATE ENGINEER BEING TREATED FOR STUTTERING

"I never wanted to take pills for my blood pressure. Why wasn't I told about the value of relaxation and weight loss?"—40 YEAR OLD MAN RECEIVING BEHAVIOURAL TRAINING AFTER HIS FIRST INFARCT

"This is the third admission our son has had. This is the first time we've been told what is wrong and involved in his care. Why didn't the other hospitals know what to do?"—FAMILY IN SOCIAL INTERVENTION PROGRAMME FOR SCHIZOPHRENIA

Non-drug remedies are currently in vogue. Some advice, like "Run for your life," is based on good sense but incomplete evidence; while other types of advice, like "Eat a healthy breakfast and live longer," are examples of purely magical thinking.[1] Nevertheless, some non-drug medical remedies are unlikely to prove ephemeral for they have been well researched and found to be effective; yet they are still not widely used. This is partly because there is no organised way of promoting non-proprietary remedies and partly because of deficiencies in quality control over such treatments so that many doctors remain cautious about the likely benefits.

Pharmaceutical remedies are different. In Australia in 1978 the pharmaceutical industry sold prescription drugs worth A$255 million and of this 20% or A$50 million was spent on promotion through advertisements in medical journals, visits of "medical representatives," and the direct support of medical meetings.[2] The support for medical meetings is often considerable. Goldberg, writing about the 1983 World Congress of Psychiatry, described striking differences in the standards of travel, accommodation, and lecture venues between the doctors supported by the drug industry and those who were not.[3] The drug industry is not philanthropic but has merely discovered the level of promotion that is necessary if a new drug is to penetrate the market. It is an efficient system. In return society benefits because the pharmaceutical industry spends a considerable amount on the research and development of new products and on ensuring the quality of the products in use.

In contrast, effective non-proprietary remedies are neglected. Lithium, effective in treating mania and preventing attacks of mania and depression, is a good example. Its use was discovered by John Cade in Melbourne in 1948, yet, despite good research confirming and extending his finding, lithium did not come into widespread clinical use until the American Psychiatric Association convened a special meeting in 1968 to examine its value. An editorial of the time noted that the 20 year delay in the introduction of lithium would not have occurred "if some person or group had a financial interest in this inexpensive and unpatentable medication."[4] Fortunately, after this meeting drug companies did begin to market and promote lithium, albeit at a greater cost.

Non-proprietary non-drug medical treatments face an even more difficult problem: not only is there no mechanism for promotion, but there are often no means to ensure the quality of the product. For example, persistent stuttering handicaps about 0·5% of the adult population and treatment used to be unrewarding. For 10 years there has been good evidence that the prolonged speech technique is an effective treatment[5,6] but it is still not widely available in the USA or in Europe. In Australia the picture was no different until two changes occurred: a private donor made A$24 000 available for promoting the technique to speech pathologists, and a new computerised measurement technique was developed which made it easier to ensure the quality of treatment.

Three important conditions

There are three important conditions for which drug therapies are not the complete answer and for which non-drug techniques, although available, are not widely used. Anxiety disorders handicap a tenth of the adult population who frequent general practitioners, cardiologists, neurologists, and psychiatrists. Benzodiazepines are effective short term remedies but the long term problems of dependence are considerable.[7] Relaxation, cognitive anxiety management, control of hyperventilation, and graded exposure have been shown to be effective techniques in managing anxiety neurosis, panic disorder, and agoraphobia respectively,[8-11] yet the use of these techniques is still largely limited to university clinics. In Australia there is no mechanism for training medical staff in these techniques and because the relaxation component is deceptively simple it is often delegated to the most junior member of the mental health team. In the United Kingdom Marks promoted graded exposure by creating the new profession of nurse therapist to carry out the treatment,[12] but no other countries seem to have solved the problem in this way.

Hypertension afflicts a fifth of Australian adults and is a serious public health problem, for these rates are nearly double those for comparable populations in the United States.[13] Drugs may be extremely effective but surveys of practice show that many people taking drugs do not comply sufficiently to get adequate control of their hypertension. Some people, particularly young adults with moderate pressures, cannot or do not wish to take these drugs, yet these are the people who should be treated if premature stroke and myocardial infarction are to be averted. Weight loss[14] and relaxation[15] offer benefits comparable to those from single drug regimens.[16] Such non-drug regimens may be more demanding of both the doctor and the patient, but, despite general agreement that their introduction would be beneficial,[17] little training is being offered to doctors in how to teach patients techniques for weight

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reduction or muscle relaxation exercises. There are problems of both promotion and quality control. In Australia some general practitioners were beginning to run classes in weight loss and relaxation but concern over quality control led to a change to the health insurance regulations that precludes payments when patients are seen in groups, thereby effectively stopping this trend. New antihypertensive drugs continue to be introduced and subsidised by the Australian government's pharmaceutical benefits scheme without any evidence that these new drugs will reach the people who at present refuse drugs.

Unless one happens to suffer from them agoraphobia and stuttering are usually regarded as relatively minor health problems. Anxiety and hypertension, although more common, at least have pharmaceutical remedies. Schizophrenia is different. Schizophrenia is to psychiatry as cancer is to general medicine—a sentence as well as a diagnosis. It afflicts 0·5% of the population, mostly young adults, and the average patient never fully recovers but suffers a permanent reduction in his or her ability to work or to relate to others. Drug treatment is effective, reducing positive symptoms by one standard deviation and allowing many who would continue to be psychotic the chance to live in the community, no longer overtly psychotic but still handicapped.[18]

In recent years four independent groups[19-22] have shown that a specific type of social intervention can double the effectiveness of drug treatment, the drugs being effective in suppressing the psychotic symptoms and the social intervention in maintaining people out of hospital (up 45%) or in the work force (up 5%). Both are cost effective in real money terms, the estimated cost:benefit ratio being 1:2·6.[23] If the social intervention treatment came in drug form it would now be in widespread use, promoted by the company that developed it and underwritten by the various government pharmaceutical benefits schemes. Because it is a non-proprietary, non-drug remedy it is not being promoted, and in Australia no one has been properly trained in its use, no extra staff have been employed to carry it out, and its use is confined to two or three enthusiasts.

I doubt whether the medical profession meant things to develop this way. A major change in the efficacy of medicine followed the drug revolution earlier this century so it is clear why we now have efficient mechanisms to allow the rapid promotion and use of new and effective drugs. Effective non-proprietary remedies were once the exception—and, like lithium, regarded as orphans—but the behaviour therapies cited above are supported by good evidence that these rigorously controlled, tightly specified behavioural procedures may be very effective. We need to develop mechanisms to promote and to ensure the quality of important non-drug treatments; mechanisms that are comparable in effectiveness to those used by the pharmaceutical industry to promote their drugs.

References

1 Thomas L. On magic in medicine. *N Engl J Med* 1978;**299**:461-3.
2 Ralph JT, Luckin AH, Conron CW. *Pharmaceutical manufacturing industry inquiry*. Canberra: Australian Government Publishing Service, 1979.
3 Goldberg D. Tales from the Vienna woods. *Lancet* 1983;ii:393.
4 Cole JO. Lithium carbonate: some recommendations. *Am J Psychiatry* 1968;**125**:556-7.
5 Andrews G, Craig A, Feyer A-M, Hoddinott S, Howie PM, Neilson M. Stuttering: a review of research findings and theories circa 1982. *J Speech Hear Disord* 1983;**48**:226-46.
6 Andrews G, Guitar B, Howie P. Meta-analysis of the effects of stuttering treatment. *J Speech Hear Disord* 1980;**45**:289-307.
7 Ashton H. Benzodiazepine withdrawal: an unfinished story. *Br Med J* 1984;**288**:1135-40.
8 Woodward R, Jones RB. Cognitive restructuring treatment: a controlled trial with anxious patients. *Behav Res Ther* 1980;**18**:401-7.
9 Canter A, Kondo CY, Knott JR. A comparison of EMG feedback and progressive muscle relaxation training. *Br J Psychiatry* 1975;**127**:470-7.
10 Lum LC. Hyperventilation and anxiety state. *J R Soc Med* 1981;**74**:1-4.
11 The Quality Assurance Project. A treatment outline for agoraphobia. *Aust NZ J Psychiatry* 1982;**16**:25-33.
12 Marks IM. New developments in psychological treatments of phobias. In: Mavissakalian M, Barlow DH, eds. *Phobia: psychological and pharmacological treatments*. New York: Guilford, 1981.
13 MacMahon SW, Leeder SR. Blood pressure levels and mortality from cerebrovascular disease in Australia and North America. *Am J Epidemiology* (in press).
14 Reisin E, Abel R, Modan M, Silverberg DS, Elighon HE, Modan B. Effect of weight loss without salt restriction on the reduction of blood pressure in overweight hypertensive patients. *N Engl J Med* 1978;**298**:1-6.
15 Patel C, Marmot MG, Terry DJ. Controlled trial of biofeedback aided behavioural methods in reducing mild hypertension. *Br Med J* 1981;**282**:2005-8.
16 Andrews G, MacMahon SW, Austin A, Byrne DG. Hypertension: a comparison of drug and non-drug treatments. *Br Med J* 1982;**284**:1523-6.
17 Anonymous. Lowering blood pressure without drugs. *Lancet* 1980;ii:459-61.
18 The Quality Assurance Project. Treatment outlines for the management of schizophrenia. *Aust NZ J Psychiatry* 1984;**18**:19-38.
19 Falloon IRH, Boyd JL, McGill CW, Razani J, Moss HB, Gilderman AM. Family management in the prevention of exacerbations of schizophrenia. A controlled study. *N Engl J Med* 1982;**306**:1437-40.
20 Goldstein MJ, Rodnick EH, Evans JR, May PRA, Steinberg MA. Drug and family therapy in the aftercare of acute schizophrenics. *Arch Gen Psychiatry* 1978;**35**:1169-77.
21 Hogarty GE, Goldberg SC, and The Collaborative Study Group, Baltimore. Drug and sociotherapy in the aftercare of schizophrenic patients. One-year relapse rates. *Arch Gen Psychiatry* 1973;**28**:56-64.
22 Leff J, Kuipers L, Berkowitz R, Eberlein-vries R, Sturgeon D. A controlled trial of social intervention in the families of schizophrenic patients. *Br J Psychiatry* 1982;**141**:121-34.
23 Andrews G, Hall W, Goldstein G, Lapsley H, Bartels R, Silove D. The economic costs of schizophrenia. implications for public policy. *Arch Gen Psychiatry* (in press).

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The importance of "bonding" between mother and baby is often referred to in the medical and lay press. This has worrying implications for parents of adopted children and also for those whose children are ill at birth and have to be nursed in special care units. What is the medical evidence for the existence of the bonding process?

One problem is the variety of terms used to describe the link between parents and infants from birth in terms of the development of their relationship. Bonding is only one of several terms. I do not find it particularly helpful because of the associations of "pair bonding" in animals, being "bound," and the general notion of being fixed one to the other. This is not helpful when thinking about developmental processes in families. The word "attachment" is far more useful. This was introduced by John Bowlby in relation to his interest in the applications of ethological theories to the development of relations between parents and infants.[1] There is now an accumulating weight of evidence for the attachment process.[1 2] The value of the notion of attachment is that it implies a progression from the close attachment between mother and infant necessary to sustain life and early development through the processes of becoming attached to others inside and outside the family. Research suggests that the most intense attachment that a child can have may not necessarily be to the biological mother, but may be to a father or a sibling, depending on the intensity with which the attachment is pursued by the two parties. It also implies that attachments are not necessarily to do with two people being together all the time, but are also to do with the way in which a series of attachments are built up and to whom we can turn at times of stress and strain. Work on depression in adulthood has shown that those individuals who have good attachments find these sustaining in later life, in the sense of giving a sense of security.[3] As adults we return to our attachments at times of need.

This broadening of the concept to attachment may then be applied in adoption. Tizard, for instance, has shown that the attachment which grows between a child who has been adopted even as late as 3 or 4 years of age and adoptive parent may be far more close and intense than the attachment existing between the child of a biological parent who has been separated from that parent and who is then returned to the parent at a later stage.[4] This indicates that the attachment potential built into us all may be activated and set in motion at a later stage in life than during the early days. Even when separation is necessary in the first days of life or even for a longer period because of a stay in a special care baby unit, provided that we are aware of the strain of a separation between a parent and an infant, the growth of attachments may be facilitated even at a later stage. It is helpful to have a unit where a mother can come in to hospital for a period of "hatching," as it were, so that the baby who has been in a special care baby unit may be with her 24 hours a day, and may have the relationship facilitated by staff encouraging the parent and the infant to respond and to get to know each other until the attachment grows. The ability to form attachments at a later stage means that we may think of getting children adopted later in life who have been abandoned, rejected, or abused. We have seen good effects of children adopted even as late as 7 or 8, but much work is needed to free the child from previous faulty attachments and help him mourn for the loss of what really has not been nurturing, to give him "space in his mind" for a new figure and a new attachment.

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1 Bowlby J. *Attachment and loss*. Vols 1-3. London: Hogarth, 1969, 1973, and 1980.
2 Rutter M. Separation and loss in relationships. In: Rutter M, Hersov L, eds. *Child psychiatry*. Oxford: Blackwell, 1977.
3 Brown G, Harris T. *The social origins of depression*. London: Tavistock, 1978.
4 Tizard B. *Adoption—a second chance*. London: Open Books, 1977.