might translate this into: they are easiest when they are least needed and hardest when they are most required.

Conclusions

I have left out a number of other matters rarely considered by clinicians when they start either to design or to participate in a clinical trial and about which the arch exponents of the discipline are somewhat coy. These include: whether entry by accrual into a trial, particularly a multicentre one, is truly random; whether we should continue to use the formal 5% level of statistical significance and what that level actually means for decision making; and the need to consider the matter of "start-up variation." I hope, however, that I have given enough of an alternative point of view to shift what I fear might have become a central dogma—the concept of overriding need to prosecute controlled clinical trials as the only way of ensuring reliable knowledge.

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Letter from . . . Perth

Puffability People: a new way to promote health

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Puffability People, a new health promotion scheme, dominated the central precinct of Perth in Western Australia on the day it was launched, 9 April 1983. Twenty five volunteers consisting of doctors, medical students, physiotherapists, nurses, athletes, and others were assembled with a vast array of high technology spirometric equipment. The long term aims of the organisation, however, lie beyond lung function testing and public awareness of smoking problems and include promotion of health through sport.

From spirometry to promotion

The ideas for forming Puffability People originated in November 1982. During that month Western Australia held its first "smoke free day," coordinated by the National Heart Foundation. As one of several projects undertaken throughout the city

to promote awareness of the smoking problem, spirometric testing was performed in the main corridor of Fremantle Hospital, one of Perth's five large public hospitals. This testing was undertaken by a doctor, an occupational therapist, a pharmacist, and a medical secretary. The term "puffability" was coined for the percentage of predicted forced expiratory volume in one second. The predicted values were made by computerised estimation using age, sex, and height. Although overlap occurred as expected between smokers and non-smokers, the average values for smokers (92% of predicted normal) were less than for non-smokers (101% of predicted normal). These measures made considerable impact on many of the smokers, particularly when they realised that their value would drop further if they continued smoking.

The group itself started in late November 1982, when a pharmacist and one of us (AGD) were interviewed on three different commercial radio stations after the first pilot trial at Fremantle Hospital. From this point we obtained a core of about six or seven volunteers, and we then made a careful search for additional volunteers over the next few months. The group is now about 70 strong.

The effects of spirometric testing as a method of promoting increased awareness of the problem of smoking have been variable. An educated interpretation of the results is, of course, essential. Even more important, however, was the unexpected

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Puffability People on the beach.

discovery we made at the Fremantle trial. The three assistants undertaking the study were attractive women from the hospital. As the computer printout gave the puffability value, one of them wrote the result on a sticker which was then stuck on the shirt of the person tested with appropriate comments aimed with considerable accuracy at the Australian ego. Many smokers were seen creeping off into a corner to remove their stickers, while proud non-smokers advertised their results around the hospital for the rest of the day. We felt that this method was along the same successful lines as the powerful promotional techniques of the tobacco industry.

So much health promotion is actually negative antisickness promotion. But how do we start true health promotion and promote the positive aspects of a nebulous non-entity such as non-smoking? Marketing men know well that you cannot promote a product by comparing it with the bad aspects of another product.

The puffability project at this stage had but a hinge about which to work. How could it become a real health promotion scheme? To learn about real promotion one has to learn from the real experts, and what could be better than the tobacco industry with its diverse and powerful promotional techniques? Such promotion is much more aggressive in Australia than in Britain and clearly associates particular brands with masculinity, femininity, virginity, sporting success, and, unashamedly, health, whereas present day health promotion simply shows smoking as being unhealthy or unsavoury. Even the attempts at positive promotion such as famous and attractive persons wearing antismoking tee shirts still carry a negative message.

The problem is simple: we are being beaten hands down by the opposition with their spectacular imagery. People, children in particular, believe what they see, not what they are told. The 100-fold financial advantage that the industry holds over us in advertising is only part of the problem. Effective against ineffective promotional techniques is another part of the problem, which is compounded by the problem of the cigarette versus the non-entity. Puffability People wants to redress this imbalance.

A major technical drawback in demonstrating tobacco induced airways disease and lung destruction with spirometric analysis is the crudeness of this test. Most of the damage caused by tobacco occurs in the small airways and alveoli, which ensures that a lot of damage needs to have occurred before an important drop in forced expiratory volume or puffability occurs. In fact, necropsy studies have shown that at least a quarter of lung parenchyma must be destroyed before there is a significant drop. This is because 90% of the resistance to expiration is in the large airways, and only 10% in the small airways. Neverthe-

less, in our pilot trial at Fremantle Hospital we found that half the smokers over 40 were below 80% puffability. Careful explanation appears, at least subjectively, to have great impact, even on smokers within the normal range.

Whatever puffability shows or does not show technically, however, has about as much relevance as whether cigarettes actually do take one to Rio, the tops of mountains, or make one into a macho man. The point is that we also now have an entity to promote—indeed, we have two. The first, of course, is puffability, and the second is Puffability People. Most Western Australians will never receive a test, and only a few will see the testing in operation. It is the Puffability People themselves who are really important.

Athletes, windsurfers, and songs

Virtually all of the Puffability People are members through direct invitation. They are all in their late teens, 20s, or early 30s and are mostly doctors, medical students, nurses, other hospital staff, and athletes. So far, each sportsman of state, national, or international standard who has been approached has pledged support. The group now includes many prominent sportsmen and women, some of whom made their own approach to join. Such promotion is, of course, free and powerful. Maximum advertising using our name and logo can be undertaken at minimum cost—for example, on tee shirts and the sails of wind-surfers used by group members. In addition, professional photographers have volunteered to take photographs for such promotions. Finance permitting, we will try to provide individual and specific tee shirts for sportsmen and women with our puffability logo printed on them.

The Australian male impresses his mate.

Concern for children is important. We intend to create two Womble sized creatures representing the smoker and the non-smoker. These will be well assessed so as to be acceptable to children, and we might give our characters such names as Mr Puff or Mr Puffing Billy. The concept is akin to the British Health Education Council's Nick-O-Teen. We are fortunate to have a poet and songwriter presently composing witty anti-smoking songs for the group to sing on the streets. We also have songs for Mr Puff and Mr Puffing-Billy and, later, we will have poetry and songs about our two Womble like characters.

Since our opening day we have been operating every Thursday evening (late night shopping) and Saturday morning, creating huge queues and testing several hundred people each few hours. We have given away several hundred "smokers' quit kits" and have received a constant barrage of inquiries, answered in part by the volunteers and supported by two groups specialising in offering help to stop smoking.

Demonstrating support for Puffability People in downtown Perth.

Before the opening day we carried out three preliminary pilot trials. We were particularly fortunate to receive two, newly designed, internally computerised spirometers from Vitalograph in Buckinghamshire. The first two trials were held at an Alcoa refinery, about 50 miles (80 km) from Perth, and the third in a quiet shopping centre also some distance from Perth. On our opening day we had five computerised spirometers and three ordinary spirometers on loan from private physicians. Twenty five volunteers operated the spirometers and worked at full pace giving explanations and also short talks about smoking and health using the numerous noticeboards and diagrams in and around the stall. All three television stations spent an hour or so filming the project in operation. The general media response

was entirely predictable: the state press was conspicuous by its virtual absence of coverage. The issue is very sensitive because of the antitobacco advertising legislation which nearly passed through the Western Australian parliament in November last year. For example, one major newspaper's only comment was to publish a letter from a person claiming that there were no data whatsoever to suggest that smoking was harmful to health. Television coverage was good with Puffability People featuring as the major news item for the evening, on all three stations. We also had reports in many suburban newspapers.

Our main difficulty has been finance. Unfortunately, in Western Australia we have been unable to get any specific support from any established health, or other, organisations, and so Puffability People was set up entirely by volunteers. Early this year one of us (AGD) visited Sydney and Britain on behalf of Puffability People and was successful in obtaining advice about many aspects of the project. Sponsorship was sought but was not forthcoming. The total cost of setting up the project will amount to \$A 38 000 (£23 000). In the last month we have been actively engaged in fund raising, largely through appeals after lectures, and we have raised over \$A 4000. With the exception of \$A 200 from the Non-Smokers' Movement of Western Australia this has been entirely from personal donations. The rest will need to come from the donations and loans of individual members of the group, who are predominantly under 25 and not well able to afford it. For a successful promotional campaign about \$A 250 000 will be needed.

The new Western Australian Labour Government has pledged itself to strong antismoking measures. How far it is prepared to go remains to be seen.

Puffability People acknowledge the long term loan of two internally computerised PFT spirometers from Vitalograph, Buckingham, Britain.

Why in the treatment of premenstrual syndrome should dydrogesterone be given from days 12 to 26 of the cycle whereas norethisterone is given from days 19 to 26 of the cycle? What are the advantages and disadvantages of dydrogesterone and norethisterone in treating the premenstrual syndrome?

Dydrogesterone and norethisterone are synthetic steroids with progesterone like actions. The treatment schedules quoted are designed to mimic the natural rise of progesterone in the second half (luteal phase) of the cycle. In the average woman this rise starts on day 14-15, though there is considerable variation among subjects. Neither a day 12 start nor a day 19 start are particularly appropriate and seem designed to give an exact 14 days' or seven days' treatment respectively. Many doctors prefer to prescribe natural progesterone rather than the synthetic compounds, but whatever treatment regimen is used there is little evidence either for a deficiency of progesterone secretion in the premenstrual syndrome or that treatment has more than a placebo effect. In practice, treatment should be symptomatic and premenstrual mastalgia, for example, may be best treated with diuretics and bromocriptine rather than progestogens.—S L JEFFCOATE, professor of biochemical endocrinology, London.

What could be the cause of severe blinding frontal headaches, usually worse on waking but continuing throughout the day? These have continued throughout the patient's adult life and seem to come in bouts. Blood pressure is normal and there are no abnormalities of the cervical spine.

There are many causes of severe frontal headaches, and presumably organic intracranial pathology has been excluded by neurological examination and the relevant investigations. The duration of the history in the absence of an objective abnormality and the lack of response to analgesics suggest chronic muscle contraction (tension) headache. Contributory depressive features need to be carefully assessed and a full history of personal circumstances and psychological stresses carefully evaluated. Generally, the duration of the history and the basic resilience of the personality will determine the response to treatment.—JOHN PEARCE, consultant neurologist, Hull.

In a small general practitioner maternity unit in a Third World country there are no resident doctors. If a woman suffers a torn perineum or episiotomy during the night is it reasonable for repair to be left until the next morning?

The accepted obstetric practice is to suture episiotomies without delay, and indeed one classic textbook¹ goes so far as to discuss repair before delivery of the placenta—though it concludes that this is inadvisable. Most obstetricians would agree that "the episiotomy should be repaired as soon as possible; union of tissues is better, with less risk of sepsis and a broken down wound; nor should the woman be subjected to prolonged apprehension of 'stitches.'"² Surgeons are taught³ that incised wounds should be sutured within six hours of the injury, presumably because of the danger of bacterial contamination. Another possible problem is that there may be a slow steady loss of blood from an unsutured perineum. Much obstetrical dogma—particularly regarding episiotomy—is now being questioned, and advice unsupported by modern clinical trials may not be accepted. (With a few exceptions⁴ reports on episiotomy were published many years ago.) Nevertheless, such healthy scepticism may sometimes result in obstetricians (and their patients) relearning basic lessons the hard way, and in this particular instance I think that standard teaching should be accepted. I appreciate the practical problems in an isolated unit and wonder if it is realistic to suggest that the attendant who made the episiotomy should be allowed to repair it. In England the Central Midwives Board has agreed that after suitable instruction midwives may suture the perineum,² though the final responsibility for authorising this rests with the doctor.—JAMES OWEN DRIFE, senior lecturer in obstetrics and gynaecology, Leicester.

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