LETTERS

Breastfeeding problems Dougal Jeffries	401	Kathryn E Griffith, Sian Wiseman and Robin M Norris
Benign prostatic hyperplasia Tim Wilson	401	The discipline of general practice <i>Francis Blacklay</i>
Randomized controlled trials Tom Fahey	401	Management of involuntary childlessne S L Goodman
General practice — a postmodern specialty Stephen D Browne	402	Practice nurse intervention Sarah Matthews and Alan Jones
Tim Stokes A J Singleton	402 403	The risk of cardiovascular disease in hy patients
Resuscitation equipment and general practiti	oners	Wilfred Treasure

Breastfeeding problems

Sir,

I read the brief report entitled, 'Professional advice on common breastfeeding problems: a primary care study' (March Journal) with some interest, but equal mystification. The article reminds me of many I have read in your Journal down the years where my interest has been aroused by the description of a potentially useful tool to improve practice, only to be frustrated by the absence of any description of the tool itself.

The report begs more questions than it answers; for example, if responses to the initial questionnaire 'reflect inconsistent advice for each question', who is to judge that the designers of the questionnaire are in possession of the correct answers? The authors cite references regarding supplementary fluids, frequent feeding, poor growth, and test weighing, but without seeing the way in which the questions were phrased it is impossible to draw any conclusions at all.

I shall write to the authors of the report asking for a copy of their questionnaire, and their version of the 'detailed explanatory answers', but why on earth could you not have saved me the trouble by printing them as an addendum?

DOUGAL JEFFRIES

Bemerton Heath Surgery Pembroke Road Salisbury SP2 9DJ

NOTE: The editor regrets that there is not sufficient available space in the Journal to publish all the extraneous information to papers such as this one. He would like to point out that publication of such material would consequently result in less papers published per issue, which, in turn, would result in less papers being accepted in the long term. The editor acknowledges that all readers may not require the additional information, but those who do can acquire it by writing to the address for correspondence printed at the end of every paper.

British Journal of General Practice, June 1997

Kathryn E Griffith, Sian Wiseman	
and Robin M Norris	403
The discipline of general practice	
Francis Blacklay	404
Management of involuntary childlessness	
S L Goodman	404
Practice nurse intervention	
Sarah Matthews and Alan Jones	404
The risk of cardiovascular disease in hype	rtensive
patients	
Wilfred Treasure	405

Benign prostatic hyperplasia

Sir.

Simpson is to be congratulated on this article which summarizes the difficult topic of benign prostatic hyperplasia (BPH) (April Journal).¹ Many guidelines have been written but often from a secondary care perspective, or at least with a bias to our urological colleagues.

The use of scoring systems should be emphasized. Since we adopted the policy of Barry² in our practice, our management of BPH has been revolutionized, and the satisfaction of our patients has risen. However, we do not routinely perform digital rectal examinations (DREs).

The use of DREs should not be taken lightly. It is an unpleasant test to have done and is, in its way, humiliating for the patient. I can only think of two reasons for performing it:

- To assess the size of the prostate. I suspect this is highly inaccurate, bears no relation to prostate volume and, when performed by a GP, is next to useless.
- To assess whether there is any malignancy. We agree with those who do not see the value in screening for prostatic cancer in the absence of treatment for early disease; therefore, we do not include PSA estimation as one of our investigations. Why then use an examination such as DRE which is only poorly sensitive and the result of which cannot be any more beneficial than PSE estimation?

Therefore, only perform DRE if you feel that estimating the size of the prostate is something that you are capable of doing accurately and that it will alter your management, and only do it with the consent of the patient, who knows that if you find a malignant prostate there is little to be done of proven benefit.

We rightly debate the value of investigations and screening tests, but rarely do we include examinations in our discussion of BPH. Digital rectal examination in this context needs some thought.

n-compliance to long-term asthma treatment ---greatest achievement

Adrian Morris

te to authors of letters: Letters submitted for blication should not exceed 400 words. All lets are subject to editing and may be shortened. tters may be sent either by post (please use uble spacing and, if possible, include a Word Windows or plain text version on an IBM -formatted disk), or by e-mail (addressed to urnal@rcgp.org.uk). All letters are acknowlged on receipt, but we regret that we cannot notify authors regarding publication.

TIM WILSON

406

Mill Stream Surgery Benson Wallingford Oxon OX10 6LA

References

- Simpson RJ. Benign prostatice hyperplasia. 1. *Br J Gen Pract* 1997; **47:** 235-240. Barry MJ, Fowler FJ, O'Leary MP, *et al.*
- The American Urological Association Symptom Index for benign prostatic hyperplasia. J Urol 1992; 148: 1549-1557.

Randomized controlled trials

Sir,

Bruce Charlton is too dismissive of randomized controlled trials (RCTs) when he states that they 'are useless for most clinicians — being worthless at best and misleading at worst' (Letters to the editor, March Journal). When making such a sweeping statement he would do well to back it up with evidence rather than personal conjecture. Perhaps he could be more specific when he cites such 'useless' RCTs. To take some recent examples, does he mean magnesium sulphate in the treatment of eclampsia,¹ or perhaps the use of HMG CoA reductase inhibitor drugs in the prevention of cardiovascular disease?2.3

There is considerable conceptual and methodological continuity between basic and clinical science. Like other clinicians, I find his division artificial and contrived.4 When faced with applying the results of an RCT to an individual patient, several pieces of information are required: basic laboratory science, animal and genetic studies (when applicable), and observational and experimental clinical studies.5 If we were to rely solely on the basic sciences, several treatments that have plausable scientific explanations - such as antiarrythmic agents and magnesium in the prophylaxis and treamtent of myocardial infarction - would be used in clinical practice. Fortunately for doctors, and more importantly for patients, they have been

STEPHEN D BROWNE

evaluated in RCTs and have been shown to be either ineffective or harmful.^{6,7}

I agree that the challenge is to apply the results of RCTs to those individuals who are most likely to benefit and least likely to suffer side effects from treatment. Solutions such as using prognostic models based on large cohorts of patients should help in the application of treatments to individuals.⁸ To invalidate the methodology of RCTs on the basis of individual applicability is simply incorrect. Until Charlton cites specific examples of RCTs that he regards as valid or invalid, and the reasons why this is so, his critique on RCTs will remain self-fulfilling rhetoric.

TOM FAHEY

University of Bristol Department of Social Medicine Canynge Hall Whiteladies Road Bristol BS8 2PR

References

- The Eclampsia Trial Collaborative Group. Which anticonvulsant for women with eclampsia? Evidence from the Collaborative Eclampsia Trial. *Lancet* 1995; 345: 1455-1463.
- Shepherd J, Cobbe SM, Ford I, et al. Prevention of coronary heart disease with prevastatin in men with hypercholesterolemia. N Engl J Med 1995; 333: 1301-1307.
- Scandinavian Simvastatin Survival Study Group. Randomized trial of cholesterol lowering in 4444 patients with coronary heart disease: the Scandinavian Simvastatin Survival Study (4S). Lancet 1994; 344: 1383-1389.
- 4. De Bono D. Mega-trials. J R Coll Physicians Lond 1995; 29: 368-369.
- Davis C. Generalizing from clinical trials. Controlled Clinical Trials 1994; 15: 11-14.
- Lau J, Antman EM, Jimenez-Silva J, et al. Cumulative meta-analysis of therapeutic trials for myocardial infarction. N Engl Med J 1992; 327: 248-254.
- ISIS 4 Collaborative Group. ISIS 4: A randomized fatorial trial assessing early captopril, oral mononitrate, and intravenous magnesium sulphate in 58 050 patients with suspected acute myocaridal infarction. *Lancet* 1995; 345: 669-682.
- Sharp SJ, Thompson SG, Altman DG. The relation between treatment benefit and underlying risk in meta-analysis. *BMJ* 1996; **313**: 735-738.

General practice — a postmodern specialty?

Sir,

I was most interested to read the paper by Mathers and Rowland (March *Journal*). I cannot claim to know much about postmodernism, but it seems that modernism embraces the enlightenment of the eighteenth century with its assumption that through reason alone a reliable body of knowledge about the universe can be assembled. Much of this involves applying scientific methods to a broad range of fields.

While postmodernism is helpful in pointing out some of the limitations of naturalistic enlightenment science and its hold over medicine, some postmodernists would see such scientific endeavour as inherently futile, self-deceptive, and oppressive.¹

At a time when general practice is becoming more evidence based, postmodern scholarship appears to promote the idea that there is no such thing as objective truth. As Michael Novak warned in his Templeton Prize speach, if there is no purchase of intellect upon reality, nothing else is left but preference and will-to-power unchecked by any regard to truth. To surrender the domain of intellect is to make a straight road to totalitarianism.² Alexander Solzhenitsyn observed that what was taken from the East by force is now being rejected by the West by its own free will.³

In an age when medicine was a mixture of superstition, dogmatic opinion, and speculation, Dr Thomas Sydenham (1624-1689) — who may be considered the father of British general practice discarded much of the medical wisdom of the day and, like Hippocrates, stressed the importance of personal scientific observation, logical deduction, accurate diagnosis, and rational therapy. However, far from being a narrow rationalist, his lifestyle was holistic with all the awareness, activity, enjoyment, development of personal powers, and creativity integrated in the single purpose of honouring God.⁴ Thus, unlike the modernists, he would not regard scientific method as the exhaustive source of knowledge and recognized its limitations. Of the pioneers of modern medicine, Sir Dennis Burkitt, with his work on preventive medicine and dietary fibre, and Dame Cicely Saunders, with her work on palliative care, also recognized the limitations of 'modernism' and the inability of scientific technology to provide all the answers.

I would submit that it is possible to recognize and allow for the uncertainties in general practice without succumbing to some of the more extreme dogmatic assertions of postmodern theory. We all need to continue our learning and recognize the limitations of our knowledge. I hope that the Royal College of General Practitioners' motto, *Cum Scienta Caritas*, with its allusion to knowledge and compassionate care, will not be surrendered in deference to postmodernism in the brave new general practice of the twenty-first century. Ash Tree Medical Centre 1536 Pershore Road Stirchley Brimingham B30 2NP

References

- 1. McKenzie R. Postmodern science. *Kategoria* 1996; **1:** 63-68.
- Novak M. Awakening from nihilism why truth matters. London: The Institute of Economic Affairs, 1995.
- Veith GE (ed.). *Guide to contemporary culture*. Leicester: Crossway Books, 1994.
 Browne S. Sydenham, the physician.
- Nucleus 1996; Jan: 22-24.

Sir,

I would like to extend Mathers and Rowland's thought-provoking discussion (March *Journal*)¹ to consider the implications of viewing general practice research as a postmodern enterprise.

General practice research involves both quantitative and qualitative methodologies. Quantitative research remains the predominant methodology and is based on a 'modern' view of the world, and works using scientific method. The underlying philosophical position of quantitative research is positivism, which emphasizes measurability, falsifiability, reliability, validity, and generalizability. Reality, the world 'out there', is not seen as being problematic; it simply exists.^{2,3} Qualitative research^{4,5} is generally used in general practice research either as a technique that is methodologically subservient to quantitative research or as a pragmatic exercise in which its findings complement qualitative research ('researching the parts other methods cannot reach').4 An example of the former might be the use of a focus group to generate themes which are then transformed, using quantitative steps, into a structured questionnaire. An example of the latter might be the use of in-depth interviewing to explore what GPs mean when they use the term 'depression'.

What is often absent, however, is an explicit discussion of the underlying philosophical position of qualitative research. This continues to be an area of debate in social and educational research, and there are those who would argue that quantitative research is phenomenological. That is, there are multiple realities. These realities are are socio-psychological constructions forming an interconnected whole and can only be understood as such.² It leads to a research approach that is interpretative and naturalistic; one seeks to make sense of phenomena in terms of the meanings people ascribe to them.

One interpretation of the above is that quantitative research is 'modern', qualitative is 'postmodern'. A postmodernist would, however, not deny the validity of the quantitative approach, but would not regard it as the only valid means of looking at the world. I would argue that if general practice research is to see itself as being postmodernist then it needs to look beyond the use of qualitative research as a research technique and to take on board its philosophical and theoretical underpinnings. This will require GP researchers to become more acquainted with sociological and anthropological theory.

TIM STOKES

University of Leicester Faculty of Medicine Leicester General Hospital Gwendolen Road Leicester LE5 4PW

References

- Mathers N, Rowland S. General practice a postmodern specialty? Br J Gen Pract 1997; 47: 177-179.
- 2. Maykut P, Morehouse R. *Beginning qualitative research: a philosophical and practical guide.* London: Farmer Press, 1994.
- 3. Bryman A. *Quantity and quality in social research*. London: Unwin Hyman, 1988.
- Pope C, Mays N. Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *BMJ* 1995; **311**: 42-45.
- Britten N, Jones R, Murphy E, Stacy R. Qualitative research methods in general practice and primary care. *Fam Pract* 1995; 12: 104-114.

Sir,

Mathers and Rowland ask whether general practice is a postmodern specialty (March *Journal*),¹ and present another example of the current institutional self-reflection being undertaken in general practice and how the *British Journal of General Practice* is becoming a catalyst for such reflection. In using the concept of postmodernism, the authors inevitably challenge the appropriateness of the continued domination of scientific method in general practice development, and reinforce the call for a 'paradigm shift' in medical practice and education.

Modern philosophers have progressed the case that knowing about the 'world' is subjective, and have challenged the notion of the existence of an objective 'world' separate to man. In so doing, it is now recognized that generalization is not valuefree, and that an understanding of the 'world' is constructed from human interpretation. As a result, the notion of universality is believed to reflect the power of one individual over another to exert their view of the world as superior to all others, rather than representing some inviolate truth.

Mathers and Rowland illustrate this by referring to the development of the new medical curriculum, indicating the difficulties GPs face in establishing their own content, and enforce their legitimacy when they say, 'how we can establish our credentials as a serious academic subject alongside the major specialties.' What they are illustrating, under the symbol of the curriclum, is the current negotiation for power and the attempt by GPs to assert their authority in the field of medical knowledge. The enlightenment gained for them through postmodernist thinking appears to be the demystification of the 'consultant's control' on medical knowledge, and the recognition that the everyday actions of GPs are an equally valid source for medical knowledge. They re-inforce the need for change with reference to the strict application of biomedicine taught at medical school and its inadequacies for GPs facing uncertainty and having to contend with 'illness in context.

It is interesting to see, in this example, how new philosophies are incorporated into institutionalized practices, and illustrates the effectiveness of the postmodern philosopher in setting the individual on the path of enlightenment. However, postmodernism is not a practice nor a set of procedures that, once adopted, delivers an expected outcome. Postmodernism is more like a tool and is limited by the capacity of its user. Mathers and Rowland's view of a general practice curriculum, published in a journal specifically designed for general practitioners, unsurprisingly provides an analysis that remains within the biomedical framework. Despite challenging the status quo, they continue to place the control of medical knowledge and the organization of the medical curriculum in the hands of the doctor, albeit the GP.

To a non-medical observer, the phrase 'postmodern specialty' could be viewed as an oxymoron, and the thesis generated by Mathers and Rowland to fall short of the mark. A wider perspective, for example, could embody a review of not just the delivery of health care, but look to question the meaning of health care. Were the paradigms upon which medical education is based to undergo a real shift, then general practice may become reinvented sufficiently to legitimize the phrase 'postmodern specialty.' However, it is unlikely that this can be done solely from within by doctors alone, and it is more likely to require participation from all society members that interact with general practice to be involved in some way in the content and organization of the medical curriculum.

A J SINGLETON

St George's Hospital Medical School Hunter Wing Cranmer Terrace London SW17 0RE

Reference

Mathers N, Rowlands S. General practice a postmodern specialty? *Br J Gen Pract* 1997; **47**: 177-179.

Resuscitation equipment and general practitioners

Sir,

Colquhoun,¹ and West and Penfold,² (January *Journal*) suggest an optimistic success rate from general practitioner attendence at out-of-hospital cardiac arrest, and encourage more GPs to carry defibrillators.

In 1994 and 1995, we recorded all cases of myocardial infarction in patients under 75 years of age in the three UK health districts of Brighton, South Glamorgan (Cardiff), and York. The aim of the study (as yet unpublished) was to re-examine the natural history of acute heart attacks following the earlier studies from England and Wales published over 20 years ago. We studied all acute events, including outof-hospital cardiac arrests and deaths, and delay times of admission to hospital.

Over two years, we recorded more than 3000 cases. Less than half of the patients were recorded as calling their GP. There are approximately 700 GPs in the three districts, so that each year, on average, each GP may have been contacted by one patient in this age group suffering from acute myocardial infarction. Not all of these patients were seen, however, as some GPs contacted the emergency ambulance service before they visited.

The overall 30 day mortality in our study was 45%. Three quarters of these deaths occurred before admission to hospital; 27 patients arrested with a GP as witness, this representing only 2% of all out-of-hospital deaths. Twenty-six per cent of this group were successfully resuscitated compared with 40% of the 5% of arrests that were witnessed by paramedics.

Rapid thrombolysis saves lives and

improves overall morbidity from acute myocardial infarction; 'minutes mean myocardium.' It has been shown that patients who call their GP arrive more than one hour later in hospital than those who dial '999' for an ambulance.³ This delay may reflect differing presentations, but it is highly likely that a GP in a busy surgery will take longer to reach a patient with chest pain and then arrange transport to a hospital than an emergency ambulance waiting for such an event. Whatever the cause, a delay of this magnitude may reduce the benefits of thrombolysis.

Both papers suggest that GPs should be equipped with defibrillators and attend life support courses, and this would of course be desirable. Assuming an average of one myocardial infarction in this age group was sent to hospital per year, and a 2% incidence was witnessed by a GP, the average GP would witness one arrest in 50 years; even if we assume a 5% arrest rate,¹ only one arrest per 20 years would be seen.

The conclusion made by the participants in our study is that patients with persistent pain should call '999' rather than the GP. Paramedics will be quicker, more experienced, and better equipped to deal with a cardiac arrest should this occur. An educational programme to this effect has been initiated in Brighton.⁴

KATHRYN E GRIFFITH

University Health Centre York University Heslington York YO1 5DD

SIAN WISEMAN

Cardiology Department York District Hospital Wigginton Road York YO2 7HE

ROBIN M NORRIS UK Heart Attack Study Coordination Centre Cardiac Department The Royal Sussex County Hospital Eastern Road Brighton BN2 5BE

References

- Colquhoun MC. Resuscitation by general practitioners. Br J Gen Pract 1997; 47: 5-6.
- West RJ, Penfold N. A questionniare study of resuscitation equipment. Br J Gen Pract 1997; 47: 37-40.
- 3. Birkenhead JS. Time delays and provision of thrombolytic treatment in six district hospitals. *BMJ* 1992; **305**: 445-448.

 Dixon GF, Norris RM, Vincent R. Heart attack action! A campaign to improve community knowledge. *Heart* 1996; **75:** 80.

The discipline of general practice^{1,2}

Sir,

The first responsible public statement of the status of general practice as a discipline was made by Sir Douglas Black, the professor of medicine at Manchester University, at about 4.30 pm on Sunday 16 April, 1961, in his concluding peroration as chairman of the College Symposium at the Midland Hotel in Manchester. I listened to it with amused astonishment as I had written it myself a few weeks preciously in a letter to Patrick Byrne, who organized the symposium. Professor Black described general practice, no doubt unknowingly, in my very own words, as a 'discipline as exact and as exacting as the other specialties.'

FRANCIS BLACKLAY

116 Hospital Street Nantwich Cheshire CW5 5RY

References

- . Pereira Gray D, Wright AF, O'Dowd T, *et al.* The discipline and literature of general practice. *Br J Gen Pract* 1997; **47:** 139-143.
- Pereira Gray D. The emergence of the discipline of general practice, its literature, and the contribution of the College Journal. *J R Coll Gen Pract* 1989; 228-233.

Management of involuntary childlessness

Sir,

The article entitled, Management of involuntary childlessness, by Himmel *et al*,¹ and Jillian Morrison's editorial (February *Journal*),² need, I think, a response from a totally different perspective: the psychosocial perspective.

The low technological techniques for fertility treatment (male sperm count and cycle diaries that are the province of the GP) and high tech. techniques that follow (referral to fertility clinic, and the invasive and high technology investigations and treatment as stated) are only 20 to 20+% successful in terms of 'take home babies',² which means that the GP is left with approximately 75% of miserable, grieving, and depressed couples who are, all too often, left to 'come to terms' with their childlessness. These couples need help in two areas, neither of which were discussed fully in the article. The first is counselling, which is very important, and the second is adoption/fostering, which offers a real chance of making a family.

The recent government white paper is very postitive in its approach towards fostering and adoption. At last, age is no barrier, colour and religion have also been relegated to their rightful positions, and all GPs should know the address of the local Social Services Fostering and Adoption Unit, the local branch of the Catholic Rescue and Church of England societies, and local Independent Adoption Agencies. It is, of course, a substitute family which is thus being created, but this substitute can give great satisfaction to infertile couples, and a real family to children in real need.

S L GOODMAN

322 Lapwing Lane Didsbury

Manchester M20 6UW

References

- Himmel W, Michelmann W, Ittner E, et al. Management of involuntary childlessness in general practice - patients' and doctors' views. Br J Gen Pract 1997; 47: 111-118.
 Morrison J. The management of involun-
- Morrison J. The management of involuntary childlessness. Br J Gen Pract 1997; 47: 69-70.

Practice nurse intervention

Sir,

In their paper, Roderick *et al* (January *Journal*) have attempted to show whether more intensive practice nurse intervention is effective in changing the cholesterol, weight, and diet of the general population. This is an important area of relevance to general practice, but their study raises issues for discussion, both in terms of their results and their interpretation.

The authors argue that dietary advice given by the practice nurse is not an effective use of resource, but their results are not generalizable for a number of reasons. First, by using the pragmatic method of opportunistic recruiting, patient selection bias is possible. We would be reassured if data had been kept on those patients who were excluded, at least in terms of numbers, compared with those recruited. Secondly, by recruiting practices involved in the general practice research framework, it is likely that the patients had been

British Journal of General Practice, June 1997

exposed to previous screening for other coronary heart disease (CHD) risk factors; e.g. for hyertension, and so there is a practice selection bias. In addition, patients attending a CHD clinic were excluded, and so those patients seen may have lower risk factors than average. It has also been shown¹ that those patients who attend for screening after invitation by letter have lower than average risk factors. This may also apply when the invitation is offered by the doctor directly.

Finally, what is deemed by the study team to be routine intervention, i.e. the use of leaflets, is perhaps unlikely to be achieved in the average practice, and we would consider it to be proactive. No mention is made of the situation where patients who receive such information return for further advice or follow up, although this may have happened on occasion.

The assumption that 'non-responders were assumed not to have changed their baseline measures' is an unsubstantiated one and may have led to a large change in interpretation. We note that in the OXCHECK study,² results were presented both with and without this group of nonattenders, and feel this would have been helpful in this study.

In CHD prevention we work within narrow margins, and it would have required a very large sample to detect clinically significant end-point measures. Primary carebased intervention via practice nurses can work.³ The whole primary health care team needs to kindle and reinforce a culture of healthy living, rather than focussing in on narrow targets and end points. The assumption that what goes on in primary care is not population based is slightly out of touch with reality when we are seeing over a million patients a week. SARAH MATTHEWS ALAN JONES

University of Wales College of Medicine Division of General Practice Health Centre, Maelfa Llanedeyrn, Cardiff CF3 7PN

References

- Jones A, Cronin P, Bowen M. Comparison of risk factors for coronary heart disease among attenders and non-attenders at a screening programme. *Br J Gen Pract* 1993; 43: 375-377.
- Imperial Cancer Research Fund OXCHECK Study Group. Effectiveness of health checks conducted by nurses in primary care: results of the OXCHECK study after one year. *BMJ* 1994; **308**: 308-312.
- Jones A, Davies D, Dove J, et al. Identification and treatment of risk factors for coronary heart disease in general practice: a possible screening model. BMJ 1988; 296: 1711-1714.

The risk of cardiovascular disease in hypertensive patients

Sir

Barton and colleagues (March *Journal*)¹ are right to say that the use of risk factors to identify individuals who will actually have cardiovascular events is an imperfect method, and that it complicates the management of hypertension. It needs to be simpler, but does not have to be perfect to be useful.

We are considering introducing a scoring system for use by doctors and nurses in our practice, which is imperfect but simple enough for mental arithmetic. The APROVD score (Annual Percentage Risk Of Vascular Death) for an individual is obtained by adding together estimates of risk derived from a variety of sources: ²⁻⁴ 6 for stroke, 5 for myocardial infarction, 2 for other vasculopathy, ¹¹/₄ each for hypercholesterolaemia, diabetes mellitus, family history of early vasculopathy, smoking, obesity, and male sex, ¹¹/₄₂ for each decade above the age of 60, and ¹¹/₄₂ for each 10 mm of diastolic pressure above 80 mmHg or 20 mm of systolic pressure above 140 mmHg.

It differs from other scoring systems^{2,5-11} in having all of the following properties: it applies to both vasculopaths and non vasculopaths, it incorporates both modifiable and unmodifiable risk factors, it produces an absolute risk estimate which is inherently meaningful rather than a relative score or ranking, it uses vascular death as the end point in recognition of the multifocal nature of vasculopathy, and it is intuitively attractive because you can tot it up in your head or on your fingers and get a feel for it rather than depending on strange formulae and charts that are rarely to hand when needed.

Only two scoring systems are wide ranging enough to be usefully compared with the APROVD scoring system (Table 1). The Coronary Risk Chart,⁷ which applies only to non-vasculopaths, gives analogous scores across the full range of risks. The New Zealand guidelines² give analogous scores for non-vasculopaths but has too broad an upper risk band and gives markedly discrepant scores for two groups of female vasculopaths. There are many possible explanations for this and I am planning to compare this group of women in our practice with the corresponding group of women from the Framingham

Table 1. Comaprison of the coronary risk chart and the New Zealand guidelines with the APROVD score.

Comparison of the coronary risk chart (CRC) and the APROVD score		Comparison of the New Zealand (NZ) guidelines and the APROVD score			
a CHD event using ris	Annual percentage risk of vascular death using the APROVD score	10 year risk of a cardiovascular event using the NZ guidelines ² (%)	Annual percentage of vascular death using the APROVD score (%)		
			Non-vasculopaths	Vasculopaths	
<5	0				
5–10	0-11/42	<10	0-11/42	None	
10–20	¹¹ /42- 1	10–20	11/42-111/42	≥1 ¹¹ ⁄₂ for 40 y old woman with BP 150/90	
20–40	1-211/42	20–40	1 ¹¹ /42-2 ¹¹ /42	≥2 ¹¹ ⁄₂ for 50 y old woman with BP 150/90–160/95	
>40	≥2	<40	≥ 2 ¹¹ / ₄₂	≥ 2 ¹¹ /42	

British Journal of General Practice, June 1997

study on which the New Zealand guidelines are based.

The APROVD score may be a useful educational tool and assist clinical judgement in matching intensity of prevention to level of risk.

WILFRED TREASURE

Muirhouse Medical Group 1 Muirhouse Avenue Edinburgh EH4 4PL

References

- Barton S, Cranney M, Hatcher J, Walley T. The risk of cardiovascular disease in hypertensive patients. [Letter.] Br J Gen Pract 1997; 47: 182.
- Jackson R. Management of raised blood pressure in New Zealand: a discussion document. *BMJ* 1993; **307**: 107-110.
- Antiplatelet Trialists' Collaboration. Collaborative overview of randomized controlled trials of antiplatelet therapy - I: Prevention of death, myocardial infarction, and stroke by prolonged therapy in various categories of patients. *BMJ* 1994; **308**: 81-106.
- 4. British Heart Foundation. *Insurance and heart disease*. London: British Heart Foundation, 1994.
- 5. Tunstall-Pedoe H. *Dundee Coronary Risk-Disk.* Dundee: CVEU, 1991.
- Scottish Heart and Arterial disease Risk Prevention (SHARP) Cardiovascular Risk Score, Dundee, Ninewells Hospital Medical School, 1992.
- Pyorala K, De Backer G, Graham I, et al. Prevention of coronary heart disease in clinical practice. Recommendations of the Task Force of the European Society of Cardiology, European Atherosclerosis Society, and European Society of Hypertension. European Heart Journal 1994; 15: 1300-1331.
- 8. Sandoz. *Riskcheck*. Camberley: Sandoz Pharmaceuticals.
- Coppola WGT, Whincup PH, Papacosta O, et al. Scoring system to identify men at high risk of stroke: a strategy for general practice. Br J Gen Pract 1995; 45: 185-189.
- 10. Myers PC. The modified CHD risk factor scoring system. (Unpublished.)
- Ramsay LE, Haq IU, Jackson PR, Yeo WW. The Sheffield table for primary prevention of coronary heart disease: corrected. *Lancet* 1996; **348**: 1251-1252.

Non-compliance to long-term asthma treatment — our greatest achievement

Sir,

Considerable effort and resources have been concentrated on increasing the awareness and early diagnosis of asthma. This has been done via national asthma education programmes world wide, and in most cases these programmes have been highly successful. One of the greatest challenges facing asthma care givers comes in the form of the pervasive noncompliance that occurs with inhaled 'preventer' medication. For optimal control of asthma, prolonged and consistent antiinflammatory therapy is required even in the absence of symptoms. The rationale being that this approach will prevent exacerbations and control the long-term morbidity of the disease.

Adherence to prescribed medication regimes has recently become a subject of great interest. The physician of old would paternalistically assume that their obedient patient would comply religiously with the treatment protocol. However, compliance studies have surprised all of us with their sobering findings.1 Fewer than 50% of patients take their medication in effective therapeutic dosages. The reasons for this are varied and complex, and numerous efforts to improve patient compliance have been disappointing. To address this issue, the Royal Pharmaceutical Society (RPS) has advocated that £1.8 million be set aside to research this subject. The RPS has also eloquently recommended that the term 'compliance' be substituted with the term 'concordance'.2 This will help to remove the 'doctor knows best' stigma from treatment and highlight a softer, more consensual, or 'mutually co-operative' approach.

In general, doctors tend to greatly overestimate adherence to their medication regimes. A recent study³ in the USA on compliance to long-term inhaled corticosteroids in asthma showed that despite patients having a good understanding of the inflammatory nature of asthma and diligently filling in diary cards, non-adherence has remained high. In the study, 95.4% of patients claimed to be taking their inhalers on a regular twice-daily basis, while their actual use was only 58.4% as determined by an electronic monitor. An interesting observation was that the more poorly controlled asthma sufferers who required rescue oral steroids or hospitalization had even worse compliance data. In this sub-group, only 13% took their inhaled 'preventer' corticosteroids regularly as prescribed.

This study has far-reaching implications when one considers the financial impact of wasted medication and the tendency for the attending physician to go on and coprescribe additional medication. Noncompliance also leads to unnecessary hospitalization for exacerbations and worsening long-term morbidity due to uncontrolled illness.

It is imperative that physicians re-evaluate their roles as 'treatment prescribers' and critically search for methods to improve 'concordance' to long-term asthma treatment.

ADRIAN MORRIS

13 Colinton Road Newlands 7700 Cape Town South Africa

References

- 1. Haynes RB, Taylor DW, Sackett DL. *Compliance in health care*. Baltimore: John Hopkins University Press, 1979.
- Royal Pharmaceuticals Scoiety of Great Britain. From compliance to concordance: towards shared goals in medicine taking. London: RPS, 1997.
- Milgrom H, Bender B, Ackerson L, et al. Non-compliance and treatment failure in children with asthma. J Allergy Clin Immunol 1997; 98: 1051-1057.