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**Note to authors of letters:** Letters submitted for publication should not exceed 400 words. All letters are subject to editing and may be shortened. Letters may be sent either by post (please use *double spacing* and, if possible, include a Word for Windows or plain text version on an IBM PC-formatted disk), or by e-mail (addressed to journal@rcgp.org.uk; please include your postal address). All letters are acknowledged on receipt, but we regret that we cannot notify authors regarding publication.

## Chaos and complexity

Sir,

Griffiths and Byrne's discussion paper (October *Journal*)<sup>1</sup> renews concerns over the ability of traditional research methods to adequately model the grey areas of primary care.<sup>2</sup> The new theories of 'chaos' and complexity provide valuable insights into possible ways forward.

Complex systems involve 'non-linear dynamics', characterized by 'sensitivity to initial conditions', and 'emergent' properties. Despite its great success, biomedical research may fail to acknowledge these cardinal features.

Studies of the so-called 'lunar' effect (by which the moon's phase allegedly influences mental health) typify the shortcomings of the linear approach, in which a single parameter (e.g. suicide rate) is measured, with the assumption that the whole community should be evenly susceptible over sustained time periods. Not surprisingly, such studies are usually negative;<sup>3</sup> positive results often being dismissed as the result of confounding products of weak variables. The interactive nature of illness triggers, as well as the idiosyncrasies of individuals, are not adequately considered; a problem hampering studies in wider contexts.

A novel design of 'lunar' study might use the new concepts (and vocabulary) of 'chaos' theory. A number of variables from a group of individuals could be plotted in a multidimensional *phase space*, which could then be examined for higher level structure as the trajectory of the system was followed over successive lunar cycles. Such structure might involve the 'bestiary' of new terms described by Schaffer and Kot,<sup>4</sup> including 'quasiperiodicity', or a 'strange attractor', such as the one found lurking in the North American measles data from before the days of vaccination and visible before the application

of non-linear dynamics.<sup>5</sup> Strange attractors are the hallmark of chaotic systems, and exhibit 'fractal' geometry, with self-similarity at differing scales. Some are known in which 'islands' of periodicity are found amid a background of 'chaos', betraying the underlying order. These unfamiliar terms, too numerous to define here, are explained by Stewart<sup>6</sup> and Gleick.<sup>7</sup>

I remain sceptical about the lunar effect, which is hardly the most vital issue but deserves a fair hearing. More broadly, the gains to be made from these new theories are considerable, and include areas of alternative medicine that are often claimed to be outside the scope of traditional trial methodology.<sup>8</sup> In addition, the status of intuition in general practice might gain timely support from the unexpected direction of the research field.

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## References

1. Griffiths F, Byrne D. General practice and the new science emerging from the theories of 'chaos' and complexity. *Br J Gen Pract* 1998; **48**: 1697-1699.
2. Evans M, Sweeney K. *The human side of medicine*. [Occasional paper 76.] London: RCGP, 1998.
3. Martin SJ, Kelly IW, Saklofske DH. Suicide and lunar cycles: a critical review over 28 years. *Psychological Reports* 1992; **71**: 787-795.
4. Schaffer WM, Kot M. Differential systems in ecology and epidemiology. In: Holden AV (ed). *Chaos*. Princeton: Princeton University Press, 1986.
5. Schaffer WM. Can non-linear dynamics elucidate mechanisms in ecology and epidemiology? *IMA Journal of Mathematics Applied in Medicine and Biology* 1985; **2**: 221-252.

6. Stewart I. *Does God play dice? The new mathematics of chaos*. [Second edition.] London: Penguin, 1997.
7. Gleick J. *Chaos: making a new science*. New York: Viking, 1987.
8. Lewith G. Comment: evidence in complementary medicine. *Medical Research Council News* 1998; **79**: 36.

Sir,

Whenever a new way of looking at the world hits the blocks, it inevitably flushes out a procession of antagonists, acolytes, and academic egos. The recent correspondence on the application of chaos and complexity theory (March *Journal*)<sup>1</sup> identifies two opposing groups: intellectuals who live in a virtual system of theoretical discourse, and pragmatists who struggle to deliver the goods in the real world.

The merging interest in the analysis of complex non-linear systems exposes the inadequacy of traditional reductionist approaches and finds a resonance with the world as seen from primary care. From the perspective of working practitioners, it begins to offer critical insights into how our environment works and the ways in which we can facilitate beneficial change.

We will leave the academics to pursue their philosophical debates but we are grateful to Griffiths and Byrne<sup>2</sup> for opening an agenda that, for us, offers new and exciting ways of handling the uncertain milieu in which we are immersed.

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## References

1. Marshall T. Chaos and complexity. [Letter.] *Br J Gen Pract* 1999; **49**: 234.
2. Griffiths F, Byrne D. General practice and the new science emerging from the theories of 'chaos' and complexity. *Br J Gen Pract* 1998; **48**: 1697-1699.

Sir,

I agree with Marshall<sup>1</sup> that it can be helpful to distinguish between the theories of chaos and complexity by saying that, in general terms, chaos theory refers to the impossibility of predicting outcomes in a complex situation, and complexity theory refers to the tendency of parts in a complex system to self-organize. But did he notice that, in his attempt to ridicule Griffiths and Byrne's paper,<sup>2</sup> which sought to demystify these concepts, he actually reinforced the authors' point?

The authors were claiming that these theories might have useful application to the social world, and general practice in particular, because we generalists are concerned with the hurly burly of everyday life (a complex system). Certainly it is no secret that living with uncertainty in the midst of this seeming 'chaos' is an everyday experience for the generalist; nor is the seemingly magical way that complex situations seem to sort themselves out one of the wonders of general practice. So, it seems sensible to me to check out if these theories help to illuminate what goes on in everyday 'real world' life.

Marshall complains that Griffiths and Byrne's attempt to apply these theories to everyday life leads to a 'number of rather unsurprising observations'. What greater validation could the authors want — that the application of these mathematical theories to their generalist context leads to conclusions so widely recognized to be true that even a critical epidemiologist can recognize them to be features of this multifaceted, complex, and very human world in which we generalists live.

First round to Griffiths and Byrne I think.

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## References

1. Marshall T. Chaos and complexity. [Letter.] *Br J Gen Pract* 1999; **49**: 234.
2. Griffiths F, Byrne D. General practice and the new science emerging from the theories of 'chaos' and complexity. *Br J Gen Pract* 1999; **48**: 1697-1699.

## Chlamydia infection in women

Sir,

Since a 'Panorama' programme on March 8, 1999, on the risks of teenage sex, *Chlamydia* infection has been widely discussed in the lay press as the 'silent threat' to female fertility.

In 1995, we conducted a questionnaire survey of 1382 women aged over 35 years who had attended inner-city practices for a cervical smear.<sup>1</sup> The aim was to investigate the associations between a history of *Chlamydia* infection, pelvic inflammatory disease, infertility, and ectopic pregnancy. Brief explanations were included in the questionnaire: *Chlamydia* also called NSU; pelvic inflammatory disease also called PID, an infection in your fallopian tubes. Infertility was defined as regular sex for a year without using contraception and without becoming pregnant.

The response rate was 76% (1056/1382). Ten per cent of responders said they had had *Chlamydia* infection, 5% pelvic inflammatory disease, 17% infertility, and 1.5% an ectopic pregnancy. Eleven per cent (8/73) of women with a history of *Chlamydia* infection had had pelvic inflammatory disease compared with 3% (25/725) without *Chlamydia* infection (relative risk [RR] = 3.2, 95% CI = 1.5 to 6.8).

Exposure to pregnancy was defined as all women who said they had ever been pregnant plus all women reporting a history of infertility. In 435 women who had tried to conceive, 52% (16/31) of those who had a history of pelvic inflammatory disease and 32% (131/404) of those without pelvic inflammatory disease had been infertile for 12 months (RR = 1.6, 95% CI = 1.1 to 2.3).

Sixteen women reported a history of ectopic pregnancy. Of those who had been pregnant, 14% (4/28) of those with a history of pelvic inflammatory disease and 3% (9/347) of those without such a history had had an ectopic pregnancy (RR = 5.5, 95% CI = 1.8 to 16.8). There was no association between a past history of *Chlamydia* infection and infertility or ectopic pregnancy, but numbers were small.

The study is limited by the reliability of self-reported data. For example, 21% of responders (217/1055) did not know if they had had *Chlamydia* infection and 11% (117/1053) did not know if they had had pelvic inflammatory disease. However, the findings are in line with previous reports<sup>2,3,4</sup> showing *Chlamydia* infection is associated with pelvic inflammatory disease, and pelvic inflammatory disease with infertility and ectopic preg-

nancy. It highlights the need for a public health campaign to reinforce our efforts in primary care to make women more aware of the risks and potential sequelae of *Chlamydia* infection.

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## References

1. Oakeshott P, Kerry S, Hay S, Hay P. Opportunistic screening for chlamydial infection at time of cervical smear testing in general practice: prevalence study. *BMJ* 1998; **316**: 351-352.
2. Bevan C, Johal B, Mumtaz G, et al. Clinical, laparoscopic and microbiological findings in acute salpingitis: report on a United Kingdom cohort. *Br J Obstet Gynaecol* 1995; **102**: 407-414.
3. Westrom L, Joesef R, Reynolds G, et al. Pelvic inflammatory disease and fertility: a cohort study of 1844 women with laparoscopically verified disease and 657 control women with normal laparoscopic results. *Sex Trans Dis* 1992; **19**: 185-192.
4. Buchan H, Vessey M, Goldacre M, Fairweather J. Morbidity following pelvic inflammatory disease. *Br J Obstet Gynaecol* 1993; **100**: 558-562.

## Cervical screening: how adequate is the feedback to GPs?

Sir,

The focus on quality in the national cervical screening programme now includes the smear taker,<sup>1</sup> and health authorities are using the 'practice inadequate smear rate' to measure smear takers' performance. The annual proportion of inadequate smears is calculated by general practice, and advice offered to practices with the highest rates; the target range being 7+/-2%.<sup>2</sup>

A smear is inadequate if it provides the cytoscreener with insufficient material to predict the presence or absence of disease, and the smear taker is responsible for ensuring the accuracy of an individual slide.<sup>2</sup> Many of the determinants of smear adequacy are impossible to quantify routinely. Some, such as hormonal status, previous treatment to the cervix, infection, inflammation, or menstruation<sup>3</sup> are outside the control of the GP. Adequacy may also be related to laboratory practice;<sup>4</sup> rates are known to vary by laboratory as well as by cytoscreener.

We examined 1064 GP smear forms received by one North Yorkshire laboratory in one month, and tried to identify the

signatory in each case. The signatory was identified as either the registered or sender GP (whose names are printed on the forms) in only 316 (30%) cases, and the practice nurse in 134 (12%) of cases. However, despite a legible signature, the status of the originator could not be ascertained on 394 (37%) forms. Thirteen forms (1%) were unsigned, 199 (19%) signatures were illegible and a further eight forms (1%) were incomplete in some way.

Minimum throughput for screening laboratories and reporting targets for abnormal smears are being implemented,<sup>5</sup> which should serve to reduce intraobserver variation. But this will not resolve the problem of monitoring and identifying poor performance in primary care. Until data collection is improved, and measures of individual performance are available, it will not be possible to determine why some practitioners have higher inadequate rates than others. We suggest that, in order to provide meaningful feedback, the data collection form should be changed. In the meantime, GPs should interpret the feedback they receive from health authorities cautiously, and are advised to audit their own performance.

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1. Patnick J, Winder R. *A practical guide for health authorities*. [NHSCSP publication no.7.] Sheffield: NHSCSP, 1997.
2. Herbert A. *Achievable standards, benchmarking for reporting & criteria for evaluating cervical cytopathology*. [NHSCSP publication No.1.] Sheffield: NHSCSP, 1995.
3. Vooijs G, van der Graaf Y, Elias A. Cellular composition of cervical smears in relation to day of menstrual cycle and the method of contraception. *Acta Cytologica* 1987; **31**: 41-426.
4. Demay RM. Common problems in papanicolaou smear interpretation. *Arch Pathol Med* 1997; **121**: 229-238.

5. Pritchard J. *Quality assurance guidelines for the cervical screening programme*. [NHSCSP publication No.3.] Sheffield: NHSCSP, 1996.

#### Near patient testing for C-reactive protein

Sir,

We were interested to read the article by Gulich *et al* (February *Journal*)<sup>1</sup> concerning the use of a near patient test (NPT) for C-reactive protein (CRP) in primary care. While it is good to see that further assessments of the use of NPT in general practice are being undertaken, the authors do not address a number of important points.

The authors state that the current evidence for the use of NPT for CRP measurement in primary care is conflicting but do not mention the reason for this, namely that different workers have found varying performance of the NPT in question when used in the community as compared with laboratory measurement.<sup>2,3</sup> Gulich and colleagues have missed an opportunity to contribute to this debate by not comparing the results from the NPT with those from an equivalent laboratory assay on a sample taken at the same time.

In addition, while they may be the first to use NPT for CRP to diagnose streptococcal sore throats, a number of other workers have assessed the use of streptococcal antigen NPT to similar ends. No mention is made of this or discussion as to the relative efficacy of these two techniques.

This is an important omission as workers using streptococcal antigen detecting NPTs have found wide variation in the sensitivity and specificity depending on which gold standard was used.<sup>4,5</sup> In particular, Wegner *et al* found that the use of double cultures (anaerobic and aerobic) as a gold standard reduced sensitivity to no more than 50% for any of the five NPTs evaluated.

Finally, in order for GPs to assess whether this NPT might be useful in their own practice, more information is needed to know who did the test, how long it took, was the result available in the consultation, and was the clinical management of patients affected as opposed to a theoretical optimal management.

Many NPTs are now available, but evaluation of them remains limited.<sup>6</sup> Before the widespread use of NPT in UK general practice can be recommended, further high quality field evaluations are needed.

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#### References

1. Gulich MS, Matschiner A, Gluck R, Zeitler H-P. Improving the diagnostic accuracy of bacterial pharyngitis by near patient measurement of C-reactive protein. *Br J Gen Pract* 1999; **49**: 119-121.
2. Hobbs FDR, Kenkre JE, Carter YH, *et al*. Reliability and feasibility of a near patient test for C-reactive protein in primary care. *Br J Gen Pract* 1996; **46**: 395-400.
3. Dinant GJ, Costongs R, Leclercq RM, can Wersch JW. Reliability of C-reactive protein measurement in general practice in the Netherlands. *Scand J Clin Lab Invest* 1994; **54**: 113-117.
4. Wegner DL, Witte DL, Schrantz RD. Insensitivity of rapid antigen detection methods and single blood sugar agar plate culture for diagnosing streptococcal pharyngitis. *JAMA* 1992; **267**: 695-697.
5. Andersen JS, Borriild NJ, Renneberg J. An evaluation of a commercial co-agglutination test for the diagnosis of group A streptococcal tonsillitis in a family practice. *Scan J Prim Health Care* 1992; **10**: 223-225.
6. Hobbs FDR, Delaney BC, Fitzmaurice DA, *et al*. A review of near patient testing in primary care. *Health Technol Assess* 1997; **1**: i-229.

#### Smoking cessation guidelines

Sir

The recently published guidelines on *Smoking cessation for health professionals* are directed primarily at GPs with whom the majority of doctor-patient encounters in the NHS take place.<sup>1</sup> The guidelines encourage GPs to advise smoking cessation 'at every opportunity'.

The average GP consultation now lasts about eight minutes, during which GPs are expected to deal with the patient's presenting problem as well as considering health promotion, of which smoking is an important element.<sup>2</sup> In addition to smoking cessation, GPs are encouraged to promote a healthy diet, exercise, moderate alcohol consumption, and sexual health, to name a few. In this time we are also expected to detect underlying disorders including depression, diabetes mellitus, hyperlipidaemia, and hypertension. GPs do not have time to ask about smoking 'at every opportunity', and exhorting them to do so is simply impractical and inappropriate. It would be more realistic and pragmatic to give advice about smoking when it is relevant to the patient's presenting complaint or when it arises in the consultation. The message would then have more impact on the patient and be a more

efficient use of limited time. Smoking advice unrelated to the issues presented at the consultation may be seen as paternalistic and intrusive by some patients, and may adversely affect the consultation dynamics.

We believe that, while cigarette cessation should remain a priority for health care professionals, it needs to be tackled in context. The new guidelines will be welcomed for the clarity they bring to the management of this difficult subject. However, the failure of the guidelines to emphasize the importance of targeting individuals and situations in which smoking advice is likely to be most effective, represents a barrier to their introduction in general practice.

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## References

1. Raw M, McNeill A, West R. Smoking cessation: evidence based recommendations for the healthcare system. *BMJ* 1999; **318**: 182-185.
2. Wilson A. Consultation length in general practice. *Br J Gen Pract* 1991; **41**: 119-122.

## Smoking cessation in primary care

Sir,

The paper by Lancaster *et al* on nurse-assisted strategies for smoking cessation (*March Journal*)<sup>1</sup> concludes that primary care resources should not be devoted to intensive smoking cessation interventions. Methodological problems in the study make this conclusion questionable.

The main concern is that using an intention-to-treat analysis means that like is not being compared with like. Whereas all subjects in the advice arm received written information on stopping smoking, only 30% of those in the extended counselling arm actually attended for counselling. Intention to treat analysis biases results in favour of the advice arm and is not appropriate here.

It is more instructive to estimate the effectiveness of a nurse-led approach in practice by examining the outcome for those smokers who did attend for counselling. Eight out of 74 attenders (10.8%)

achieved biochemically validated sustained abstinence, compared with 4.0% in the advice group. This is a very respectable success rate for a relatively low intensity intervention.

Based on the recruitment figures for the trial (497 subjects recruited from six practices during the study period — which, although not specified, I assume to have been a year), an average practice could expect 25 (30% of 83) smokers per year to attend a nurse-run clinic. This is likely to be an underestimate, since some smokers will have been deterred from participating in the trial by the need to provide a salivary sample for validation. Assuming then that 30 smokers per year attended, three would be expected to stop for good. This compares with four (4% of 100) who might be expected to stop with an 'advice only' strategy. The important point is that, while some smokers will stop after brief advice alone, others will require more intensive input; it is not a case of 'either/or'. This is recognized in recent policy changes, which favour establishing a range of smoking interventions of differing intensities.<sup>2</sup>

No economic analysis is presented in the paper, but it is possible to estimate the cost of a nurse-led clinic. Assuming that each smoker attends for a total of one hour's counselling, that the nurse receives eight hours training per year, and that nurse's time costs £20 per hour, it would cost £250 to produce one ex-smoker. Contrary to the authors' conclusion, this would be an extremely cost-effective use of NHS resources.

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## References

1. Lancaster T, Dobbie W, Vos K, *et al*. Randomized trial of nurse-assisted strategies for smoking cessation in primary care. *Br J Gen Pract* 1999; **49**: 191-194.
2. Secretary of State for Health and Secretaries of State for Scotland, Wales and Northern Ireland. *Smoking kills*. London: HMSO, 1998.

## Tonics

Sir,

It was refreshing to read Dr Colin Smith's letter regarding tonics (*February Journal*),<sup>1</sup> especially for an old-fashioned GP like myself. Although the list of proprietary products has shrunk in *Mimms*

since I joined general practice almost three decades ago, unfortunately demand has not. We still have patients asking for the name of a good tonic that they can purchase over the counter or asking for a tonic outright.

In the past four years the sale of health products has mushroomed. Some of these products contain vitamins and minerals and various combinations of ginseng. What are they to be called? They are tonics. Demand for these products has increased whether for rejuvenating purposes or even as placebos, and there is certainly room for prescribing them on the FP10, especially for elderly lonely patients whose diets are far from satisfactory.

This all reminds me of an incident some thirty years ago when I was working in Ireland. I applied for a senior house officer job and the only enquiry from my employing authority was, 'Do you drink?' I said no. I got the job. On my first day at lunchtime my tray had a bottle of stout on it. I couldn't believe my eyes given the question I had been asked at interview. Hesitantly I checked with the kitchen lady who told me, 'It's only a tonic!'

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## The adolescent view of accessing health services

Sir

Most information on the health needs of young people and the difficulties they have accessing care is derived from postal questionnaires or surveys in schools rather than opportunistically within a general practice setting.<sup>1-7</sup>

We wish to report findings of a descriptive cross-sectional study undertaken during the six months between 1 November 1997 and 30 April 1998 at the main branch of a semi-rural practice serving approximately 7500 patients and targeting all patients aged between 12 and 17 years attending during this period. One aim was to look at important factors that would make access to care easier for young people within their own general practice setting.

A questionnaire was developed following a literature search and then validated in a two-week pilot study. In the main study, the total number of questionnaires successfully completed and analysed was 110. This was disappointing as this number only represents 25% of attendance in this age group over a six-month period. The low return is thought to be owing to the heavy workload of reception staff who were required to identify the age group, explain the reasons for the study, and give out questionnaires and instructions.

The majority (84%) of patients below the age of 16 years attended with a parent or guardian. No person aged less than 14 years attended for family planning/contraceptive advice, and no males of any age attended for help with contraception.

The main factors of importance in accessing help were assurance of confidentiality, friendly and welcoming staff at the reception, and being able to see a general practitioner alone or with a friend rather than with a parent. Encouragingly, only seven patients (6.4%) stated that they felt unable to seek help in all areas of need from their general practice.

A strong need was for assurances of confidentiality and easy private access for young people, with no barrier to this from reception onwards. The introduction of a policy to ensure open, confidential access to unaccompanied young people, in order that all their health needs can be addressed, could be used to improve the accessibility of general practice. Repeated guarantees of a confidential service are needed.

Although this study was hindered by the small sample size (as a result of limited resources to fund a dedicated person to ensure good distribution and collection of the questionnaires), it does support and extend the findings of larger studies<sup>1-7</sup> outside of the general practice setting.

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## References

1. Epstein R, Rice P, Wallace P. Teenager's health concerns: implications for primary health care professionals. *J R Coll Gen Pract* 1989; **39**: 247-249.
2. Bewley B, Higgs R, Jones A. Adolescent patients in an inner London general practice: their attitudes to illness and health care. *J R Coll Gen Pract* 1984; **34**: 543-546.
3. MacFarlane A, McPherson A, McPherson K, Ahmed L. Teenagers and their health. *Arch Dis Child* 1987; **62**: 1125-1129.

4. Seamark C, Pereira Gray D. Do teenagers consult general practitioners for contraceptive advice? *Br J Fam Plan* 1995; **21**: 50-51.
5. Jacobson L, Wilkinson C, Roisin M, Hackett P. Communication between teenagers and British general practitioners: a preliminary study of the teenage perspective. *Ambulatory Child Health* 1996; **1**: 291-301.
6. Kari J, Donovan C, Li J, Taylor B. Adolescents' attitudes to general practice in North London. *Br J Gen Pract* 1997; **47**: 109-110.
7. Cheng T, Savageau J, Sattler A, DeWitt T. Confidentiality in health care. A survey of knowledge, perceptions and attitudes among high school students. *JAMA* 1993; **269**: 1404-1407.

## How many tonsillectomies are based on evidence from randomized controlled trials?

Sir,

Systematic review has identified a minimum threshold when tonsillectomy for recurrent throat infection in children is reasonably effective.<sup>1</sup> Patients should have had at least seven, documented throat infections in the previous year, or five yearly in two years, or three yearly in three years. To count, throat infections should be characterized by at least one of four clinical criteria: an oral temperature higher than 38.3°C, cervical lymphadenopathy of more than 2 cm, pus visible on the tonsils, a throat culture positive for *Streptococcus*. Documentation is important, as undocumented episodes do not accurately predict the frequency of subsequent infection.<sup>2</sup>

Because the prognosis in less severely affected children is relatively benign, there is insufficient evidence to justify tonsillectomy in patients falling below this threshold. No randomized controlled trial supports the use of adeno-tonsillectomy for upper airway obstruction.<sup>3</sup> Two randomized controlled trials suggest that adeno-tonsillectomy confers no advantage over adenoidectomy alone for otitis media.<sup>4,5</sup> Given that there are relatively few evidence-based indications, how

many tonsillectomies are currently carried out on the basis of evidence rather than custom and practice?

Practices in Northamptonshire were invited to take part in a retrospective survey of the indications for tonsillectomy. Registered patients who underwent tonsillectomy in 1996 were identified from their computerized records. Practices recorded their age and sex, the indication for surgery, and the number of documented throat infections in the three years immediately prior to surgery. All documented throat infections were counted towards meeting the criteria.

Thirteen practices (out of a possible 85), covering a total population of 115 000, took part in the survey (Table 1). The majority of tonsillectomies were carried out for recurrent or chronic throat infection: just over one-quarter was evidence-based. One in eight was carried out for obstructive symptoms (snoring, sleep apnoea, or mouth breathing); indications for which there is no evidence from controlled trials. Almost one-fifth were carried out for otitis media, ear infection, or hearing problems. Overall, 24% (95% CI = 18 to 31) of tonsillectomies were evidence-based: 37% (95% CI = 30% to 45%) if all those undertaken for sleep apnoea are accepted.

The survey suggests that a minority of tonsillectomies were evidence-based. It seems unlikely that the participating practices systematically documented fewer throat infections than other practices. Systematic under-ascertainment of tonsillectomy patients who suffered more documented throat infections is also unlikely.

The Northamptonshire tonsillectomy rate is higher than the average for England (2.0 versus 1.5 per 1000). It would be of interest to establish whether similar or different findings applied to other districts. The findings also raise concerns about the degree to which patient's consent is informed and whether tonsillectomy is a cost-effective use of health care resources.

TOM MARSHALL

**Table 1.** Numbers of tonsillectomies that are evidence-based.

| Main indication for tonsillectomy     | Current practice |                     | Evidence-based |                     |
|---------------------------------------|------------------|---------------------|----------------|---------------------|
|                                       | Number           | Percentage (95% CI) | Number         | Percentage (95% CI) |
| Recurrent or chronic throat infection | 104              | 63 (55-70)          | 27             | 26 (18-34)          |
| Obstructive symptoms                  | 22               | 13 (8-18)           | 0              | 0                   |
| Otitis media or hearing problems      | 30               | 18 (12-24)          | 3              | 10 (0-21)           |
| Tonsillar mass                        | 4                | 2 (0-5)             | 4              | 100                 |
| Quinsy                                | 2                | 1 (0-3)             | 2              | 100                 |
| Miscellaneous and unknown             | 4                | 2 (0-5)             | 4              | 100                 |
| Total                                 | 166              | 100                 | 40             | 24 (18-31)          |

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## References

1. Marshall T. A review of tonsillectomy for recurrent throat infection. *Br J Gen Pract* 1998; **48**: 1331-1335.
2. Paradise JL, Bluestone CD, Bachman RZ, et al. History of recurrent sore throat as an indication for tonsillectomy: predictive limitations of histories that are undocumented. *N Engl J Med* 1978; **298**: 409-413.
3. Bridgman SA, Dunn KM. The use of surgery for the treatment of obstructive sleep apnoea (Cochrane Review). In: *The Cochrane Library*. [Issue 4.] Oxford: Update Software, 1998.
4. Maw AR, Herod F. Otolaryngologic, impedance, and audiometric findings in glue ear treated by adenoidectomy and tonsillectomy. A prospective randomised study. *Lancet* 1986; **1**: 1399-1402.
5. Lidholdt T. Ventilation tubes in secretory otitis media. A randomized controlled study of the course the complications and the sequelae of ventilation tubes. *Acta Otolaryngologica (Supplement Stockholm)*, 1983; **398**:1-28.

## The National Sentinel Audit Project on the management of dyspepsia and *H. pylori*

Sir,

We would like to bring our project (the National Sentinel Audit Project on the management of dyspepsia and *Helicobacter pylori*) to the attention of colleagues in General Practice.

More money is spent in the UK on drugs for dyspepsia than on any other treatment for a symptom: in 1994 over £400 million was spent on prescription drugs for ulcer healing. Only about 25% of sufferers of dyspepsia consult their GP, but these comprise 4% of general practice consultations, and about 10% are referred for hospital consultation or investigation.<sup>1</sup> Thus, current expenditure is high, and the potential for further expenditure is considerable.

About one-third of cases of dyspepsia are associated with prolonged infection with the bacterium *H. pylori*. The conditions involved include duodenal and gastric ulcer, gastritis, duodenitis, and gastric cancer. Eradication of the infection with antibiotics heals ulcers and reduces the chances that they will recur, which avoids the need for patients to take prolonged therapy with expensive acid secretion suppressants. Hence, the overall cost of treatment is reduced. The GP is therefore an important gatekeeper for resources. Although many health authorities have developed local policies for the investiga-

tion and treatment of dyspepsia (with the main aim of controlling costs), the initial results of our audit show that about 23% have not.

The National Sentinel Audit Project, *Helicobacter pylori* and the management of dyspepsia, will run over two years and has been endorsed and specially funded by the NHS Executive. The aims of the project are twofold: systematically to review local policies for the management of dyspepsia and *Helicobacter pylori*, and to work with providers in selected health authorities to develop and improve local guidelines.

Intended outcomes of relevance to GPs include the encouragement of health authorities to develop and update their policies by consultation with all relevant individuals and to disseminate standards of good guideline practice in this area.

We seek the support and cooperation of GPs and invite them to keep abreast of the developments of this important project via The Royal College of Pathologists website (<http://www.rcpath.org>).

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## Reference

1. British Society of Gastroenterologists. *Dyspepsia management guidelines*. London: British Society of Gastroenterologists, 1996.

## Non-attendance and mental health problems in primary care

Sir,

Those who fail to attend appointments in general practice are variously criticized (for 'wasting resources'), despaired of ('not again!'), and possibly silently thanked ('great - I can catch up'). It has, however, been suggested that non-attenders form an atypical group; associations with age, race, and socio-economic status having been described.<sup>1-3</sup> Anecdotal evidence also suggests an association with mental health difficulties, and such difficulties are often undiagnosed in primary care.<sup>4</sup>

I decided to carry out a pilot study to attempt to assess the extent of mental

health problems in this population. One hundred and twenty consecutive patients who failed to attend a doctor's appointment were identified, and were posted an anonymized 12-point Goldberg General Health Questionnaire (GHQ-12). (The GHQ-12 is a well-validated screening tool for the identification of psychiatric illness in a primary care setting.<sup>5</sup>) In total, 68 questionnaires were returned (56.6%). One questionnaire was returned incomplete and 67 questionnaires were thus scored. The GHQ-12 was scored according to the GHQ method (0011) using a threshold of 2/3. Scores above this level were observed in 37 responses. The questionnaire has a median sensitivity and specificity of 0.837 and 0.790 respectively when employed in this way, and the percentage of responders having mental health difficulties was thus estimated to be 54.5%.

This study suggests that, as estimated by the GHQ, roughly half of responding patients who fail to attend their doctor's appointment in a general practice population may be suffering from a psychiatric disorder. Further work should be undertaken to confirm this finding. This would probably best be carried out via interview of a large population to minimize responder-bias, and ideally should be controlled. Confirmation of a high prevalence of psychiatric disorders in this group should challenge us to review the way we address the 'problem' of non-attendance. Given that psychiatric disorders are under-diagnosed in primary care, we may be able to more sensitively identify such problems if we recognize an association with failure to attend. At the very least we should view non-attenders as potentially vulnerable people at risk of mental health problems, and not simply as individuals who fail to comply with appointment systems.

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## References

1. Goldman L, Friedin R, Cook EF, et al. A multivariate approach to the prediction of no-show behaviour in a primary care center. *Arch Intern Med* 1982; **142**(3): 563-567.
2. Simmons AV, Atkinson K, Atkinson P, Crosse B. Failure of patients to attend a medical outpatient clinic. *J R Coll Phys Lond* 1997; **31**: 70-73.

- Pill R, French J, Harding K, Stott N. Invitation to attend a health check in a general practice setting: comparison of attenders and non-attenders. *J R Coll Gen Pract* 1988; **38**: 53-56.
- Goldberg D, Huxley P. *Mental illness in the community. The pathways to psychiatric care*. London: Tavistock, 1980.
- Goldberg D, Gater R, Sartorius N, et al. The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psych Med* 1997; **27**: 191-197.

### Children of depressed parents

Sir,

We welcome the recent flurry of papers concerning depression in primary care.<sup>1,2</sup> It appears likely that the attention now given to this condition in primary care will result in improved management of patients and better outcomes. There is one aspect of depression, however, that has received scant attention: the effect it has on the children of depressed parents.

Women with young children are a high-risk group for depression. Intuition would suggest that depression in a parent has a profound impact on children, and research supports this belief. For instance, such children have increased rates of mental disorder themselves, with boys perhaps being at particular risk.<sup>3</sup> There is also a growing recognition of the importance that parental mental illness, including depression, plays in cases of fatal child abuse.<sup>4</sup>

The rapid recognition and effective treatment of the depressed parent will often be the most important intervention for the children as well as the parent. If the parent improves, it is likely that the children will as well. However, we would suggest that a more proactive response to the needs of such children within primary care may be beneficial. GPs and other primary care staff will often be the only professionals aware of a parent's mental state, and patients may be more willing to accept offers of help from primary care staff compared with that of social services or mental health services, which can be perceived as threatening and stigmatizing.

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### References

- Wright AF. Through a glass darkly: understanding depression. *Br J Gen Pract* 1999; **49**: 91-92.
- Littlejohns P, Cluzeau F, Bale R, et al. The quantity and quality of clinical practice guidelines for the management of depression in primary care in the UK. *Br J Gen Pract* 1999; **49**: 205-210.
- Rutter M, Quinton D. Parental psychiatric disorder: effects on children. *Psychol Med* 1984; **14**: 853-880.
- Falkov A. *Working together 'part 8' reports: fatal abuse and parental psychiatric disorder*. London: DoH, 1995.

### GP out-of-hours cooperatives and the delivery of palliative care

Sir,

There is much current discussion regarding the out-of-hours provision of palliative care by GPs, especially by those in cooperatives.<sup>1</sup> Barclay *et al* demonstrated that, for their out-of-hours cooperative, communication between GPs and the cooperative was poor for terminally ill patients.<sup>2</sup> This, as far as we know, has been the only published evidence of poor communication, and it has been cited as reflecting the general situation within GP cooperatives.<sup>3,4</sup> We believe many cooperatives are aware of this problem and are using innovative means to improve communication, including dedicated fax forms and computer 'flagging' of known terminally ill patients.

We would like to present the results of our own multidisciplinary audit at Grampian Doctors on Call Services (GDOCS), which, we believe, shows that communication by GPs for terminally ill patients can be improved.

In November to December 1997, we found that, for 24 terminally ill patients registered with coop members and identified by district nurses as 'likely to die within four weeks', only five (21%) had been notified to the coop by their GP. However, for these patients, we found that 18 (75%) had contact with the coop either for advice or for a visit. In January 1998, members adopted a dedicated fax form for GPs to inform the coop of terminally ill patients. In September 1998, the audit was repeated. It was found that, of the 20 patients identified by district nurses, GPs had informed the coop of 11 (55%) using the fax form.

Cooperatives have been looked upon as a 'worrying development' for the vulnerable group of terminally ill patients.<sup>5</sup> We believe that within coopers there are benefits for GPs and ultimately patients in terms of learning from peers and pursuing best practice by audit in the area of palliative care. We propose to now perform a

multicentre audit of quality of care for the terminally ill delivered by GPs within out-of-hours cooperatives. Our belief is that, rather than bemoaning the advent of GP cooperatives as a negative development, coop members with a palliative care interest need to take a proactive role in developing systems and encouraging colleagues to deliver excellent care.

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### References

- GPs voice concern at on-call palliative care. *GP Newspaper* 1999; **19 February**: 19.
- Barclay S, Rogers M, Todd C. Communication between GPs and cooperatives is poor for terminally ill patients. *BMJ* 1997; **315**: 1235b-1236.
- Chambers J. Terminally ill patients treated in the community should keep a copy of their records. *BMJ* 1998; **317**: 283.
- Higginson I. Who needs palliative care? *J R Soc Med* 1998; **91**: 563-564.
- Barclay S. Palliative care in the community - the role of the primary health care team. *Palliative Care Today* 1998; **4**: 46-47.

### Correction

In the May issue of the Journal there were a number of printing errors in Figure 1 of 'Barriers to optimum management of heart failure by general practitioners' by Horne *et al* (page 356). Reproduced below is the corrected diagram, and we apologize for any confusion this may have caused.

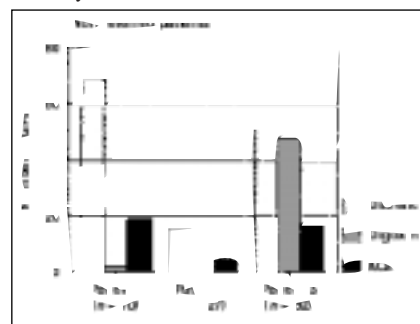


Figure 1. GPs contacted by GP for various reasons. (1, 2, and 3)