LETTERS

| Efficient inhaler devices | Patient choice of general practice | | Anecdotes and empiricism | | |
|---|------------------------------------|--|--------------------------|---|-----|
| David K Cragg | 199 | Michael B Taylor | 200 | Peter May | 201 |
| Inhaler devices for patients with asthma Dave Fitzmaurice and Ros Salter | 199 | Computer medical records John Robson, Linda McFarlane | | Anecdotes and empiricism Jane McNaughton | 201 |
| Management of opiate dependence Hartley Noble | 200 | and Maggie Falshaw | 200 | Note to authors of letters: Please note that al letters submitted for publication should be typed | |
| Problem drug users | | Health promotion | | with double spacing. Failure to comp | |
| Andrew Byrne | 200 | John Pitts | 201 | may lead to delay in publication. | |

Efficient inhaler devices

Sir,

I read with interest the paper by Jackson and Lipworth (December *Journal*, p. 683) on optimizing inhaled drug delivery in patients with asthma, and would concur with their conclusion that an important aspect of management with spacer devices is attention to technique. However, the implication that reservoir dry powder devices are inherently efficient must be treated with caution because lung deposition of drug depends critically on a correct inhalational rate.

With all devices, education in technique is vital to optimize both pulmonary deposition of drug and pulmonary function.^{1,2} Unfortunately, however, even with reservoir dry powder inhalers, incorrect technique is a common finding.³

One method of teaching technique with a range of devices is the use of scoring systems^{3,4} which award one point for each correctly performed step in both preparation and usage. Thus, problems can be identified or different devices compared for ease of usage. However, the role of such systems in monitoring changes in performance over time is not fully known. Therefore, it was decided to audit the technique of our inhaler users to see if any improvements following training could be sustained.

Over a 3-month period, the inhaler technique of all patients attending the asthma clinic of one suburban practice was analysed using a scoring system which awarded one point for each of the following six correctly performed steps: cleanliness and serviceability; preparation; exhalation; positioning of mouthpiece; inhalation and/or activation; and breathholding. Incorrect steps identified were explained to the patient, and corrected using verbal instruction and demonstration. At follow-up, technique was analysed again using the same scoring system. The assessor was unaware of the previous score.

Seventy-two patients were entered into the study; mean age was 22 years (range 1-84). Thirty-six patients used metereddose inhalers (MDI), 13 dry powder capsule devices, 10 turbohalers, eight spacer devices and five diskhalers. Overall correct usage, defined as a score of six points, was observed in 41 out of 72 patients (56.9%) during the assessment at visit 1. Following training, all patients were able to use their inhalers correctly. At visit 2, correct usage was noted in 62 out of 72 patients (86.1%), a significant improvement of 29.2% [McNemar corrected $\chi^2 = 17.4$, P < 0.001, 95% confidence interval (CI) of difference 16.2–42.3%].

The two commonest faults found in all devices were adequate exhalation and breath-holding. These improved significantly. Adequate exhalation improved from 62 out of 72 (86.1%) to 70 out of 72 patients (97.2%) (difference 11.1%, McNemar corrected $\chi^2 = 5.44$, P < 0.05, 95% CI of difference 3.3–18.9%), and adequate breath holding improved from 43 out of 72 patients (59.7%) to 62 out of 72 (86.1%) (difference 26.4%, McNemar corrected $\chi^2 = 15.43$, P < 0.001, 95% CI of difference 13.4–39.4%).

This study shows that inhaler technique, and in particular, two of the most commonly found faults in technique, can be improved following instruction, and that this improvement can be sustained. Verbal instruction takes little time and has been shown to be as equally effective as the use of mechanical teaching aids.5 Additionally, the recording of a score for each correctly performed step allows a systematic approach during consultations and clinics. Vigilance is important whichever type of inhaler is used because efficient devices are only the product of efficient technique.

DAVID K CRAGG

Department of General Practice University of Manchester Rusholme Health Centre, Walmer Street, Manchester M14 5NP

References

- 1. Hansen OR, Pederson S. Optimal inhalation technique with the terbutaline turbohaler. *Eur Resp J* 1989; **2:** 637-639.
- Newman SP, Pavia D, Clarke SW. How should a Beta-adrenergic bronchodilator be inhaled? Eur J Resp Dis 1981; 62: 3-21.
- Hilton S. Audit of inhaler technique among asthma patients of 34 general practitioners. Br J Gen Prac 1990; 40: 505-506.

- Jones K, Middleton M. Benefits of an inhaler technique scoring system. *Update* 1989: 1393: 1399-1403.
- De Blaquiere P, Christensen DB, Carter W, Martin TR. Use and misuse of metered-dose inhalers by patients with chronic lung disease. A controlled, randomized trial of two instruction methods. Am Rev Resp Dis 1989; 140: 910-916.

Inhaler devices for patients with asthma

Sir,

Ware writing in response to the recent discussion paper by Jackson and Lipworth (December Journal, p. 683) regarding the choice of inhaler device in patients with asthma. Whilst we agree with the essence of the article, that metered dose inhalers do not represent the most efficient of effective way of delivering either B2 agonists or corticosteroids to the lung, there are, in fact, few conclusive long-term data to suggest that the use of either dry powder devices or spacers has any measurable effect on patient outcome. The studies quoted concentrate particularly on lung deposition, and the clinical trials are either too short to be convincing or concentrate on the final steroid dose rather than functional ability and quality of life. There remains an absence of hard evidence. By utilizing a more sophisticated delivery system, patient asthmatic control functional status and quality of life may be improved. If this hypothesis were correct, one could imagine a significant cost saving overall, with a reduction in consultations and hospital admissions, but this remains to be quantified.

A recent study looking at the effectiveness of different inhalers in chronic obstructive pulmonary disease confirms that a large proportion of patients are unable to use metered dose inhalers effectively, but up to 96% of patients are able to use dry powder devices successfully. The time has come to move away from proxy measures of health outcomes in asthma and look at what is important from the patient's point of view.

DAVE FITZMAURICE

ROS SALTER

Department of General Practice Clinical Research and Trials Unit The University of Birmingham The Medical School Edgbaston, Birmingham B15 2TT

Reference

 Van der Palen J, et al. Evaluation of the effectiveness of four different inhalers in patients with chronic obstructive pulmonary disease. Thorax 1995; 50: 1183–1187.

Management of opiate dependence

Sir,

I was most interested in Martyn Judson's letter (December *Journal*, p. 688). Having been retired for some years, I do locum duties for various local general practices and in the three H.M. prisons in this area.

Drug addiction is an increasing local problem; one of the difficulties is that drug addicts ten to 'move on' for various reasons and it is not possible to get any 'feedback' information on how much our efforts to help them have been successful.

My own 'follow-up' efforts have given depressing results, including one young addict (with whom I had spent much time trying to help) dying from an overdose of drugs and alcohol.

Dr Judson's results are most encouraging, but I would make the following points from his letter:

- (1) His results of 95% abstinence are remarkably good; however, it is not clear how dependent his patients are on methadone, which is an opioid agonist: Are they on a continual reducing dose? How long does it take to wean them off addictive drugs? How many are successful?
- (2) Dr Judson claims that some physicians treat drug addicts with contempt, distaste and disdain when, in fact, these patients have a disease. If this is true, then it is partly because most patients wish their physician to help them to recover from their disease; many drug addicts consult their doctor simply to obtain more drugs. They are most demanding of time, and are abusive and noisy if not given what they want, upsetting the doctor, his staff and patients in the wanting room.

Finally, I must congratulate Dr Judson on the success of his special unit and I would agree with him that it would seem to be the best way of helping this very sad group within our communities. However, unlike Ontario, I doubt if British physicians in the National Health Service would have the 'luxury of devoting as much time as they need to interviews with drug-dependent patients'.

HARTLEY NOBLE

'Hillside' 113 Wards Hill Road Minster in Sheppey Kent ME12 2LH

Problem drug users

Sir.

I read with interest the editorial on problem drug users by Wilson *et al* (September *Journal*, p. 454).

I agree with the general theme of the authors, but would take exception to two related assertions.

While adding psycho-social supports certainly improves treatment outcomes, the provision of methadone alone with virtually no additional support has also been shown to yield significant benefits to patients. Even doctors with little experience in the area, given some guidelines based on simple pharmacology and therapeutics, would be doing much good and little harm in prescribing to addicts who are otherwise denied appropriate treatment.

Though respecting Scottish GPs' claims for increased funding for the treatment of addictions, it is my belief that most drug and alcohol treatment lies directly within the scope of general medical services.

Over the past 10 years in New South Wales, the number of GP methadone prescribers has risen from a handful to over 200. Most treat their patients using their nursing, pathology and pharmacy staff, as they would for patients with other conditions. Most GPs have found it a very rewarding experience and there have been no 'horror stories' reported. One of the accompaniments has been a drug-user HIV incidence below 1%, compared with up to 50% in some foreign studies.

I was shocked to read that some British GPs are so busy that others must write their prescriptions. In addition, may I suggest that there is evidence for the benefit of other prescribed drugs in chemical dependence. Naltrexone, buprenorphine, disulfiram and even heroin itself have all shown some promise.

ANDREW BYRNE

75 Redfern Street Redfern NSW 2016 Australia

Patient choice of general practice

Sir.

The excellent paper by Thomas and colleagues (November *Journal*, p.581) is not

the first paper to demonstrate that patients in general prefer small practices, nor will it be the last, as evidenced by Baker and Streatfield's paper exploring the practice characteristics that influence patient satisfaction (December *Journal*, p.654).

There is evidence that the healthy and the sick look for a different health service. There is no doubt that those who steer the health service are healthy and predominantly upper class and that most are men. My anxiety is that general practice is being moulded by the opinions of the healthy rather than by the needs of the sick.

Most jewels have flaws. The paper by Thomas and colleagues is no exception. They state without validation, 'single-handed general practitioners gaining patients do not generally conform to the characterization of the good practice (greater access and wider services) being encouraged in government policy'. For access the contrary is true; small practices provide greater access.² As regards wider services, I have seen no evidence to suggest that single-handed general practitioners provide fewer services to individual patients than do their group practice colleagues.

MICHAEL B TAYLOR

19 York Street Heywood Lancashire OL10 4NN

References

- Hopton JL, Dlugolecka M. Patients' perceptions of need for primary health care services: useful for priority setting? BMJ 1995: 310: 1237-1240.
- Baker D, Legh-Smith J. Access to primary health care. Bath: Centre for the analysis of social policy, University of Bath, 1992.

Computer medical records

Sir,

In August 1995, we carried out an analysis similar to Pringle and colleagues' assessment of the completeness and accuracy of computer medical records in four practices committed to recording data on computer (October *Journal*, p.537).

In a six-principal practice which has been computerized for 10 years, we compared the computer-held records of 1000 randomly selected patients aged between 30 and 64 years with the paper medical records of the same patients. Eighty-four per cent of 153 patients with a record of chronic obstructive airways disease or asthma in their paper medical records, 96% of 46 patients with diabetes, and 80% of 65 patients with coronary heart disease were correctly identified in the