

## Letters

# Daily regimen and compliance with treatment

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## All available evidence needs to be evaluated

**Knut Schroeder** ([k.schroeder@bristol.ac.uk](mailto:k.schroeder@bristol.ac.uk)), **Medical Research Council training fellow in health services research, division of primary health care, Shah Ebrahim, professor in epidemiology of ageing, department of social medicine, Tom Fahey, senior lecturer in general practice, division of primary health care, Alan Montgomery, Medical Research Council fellow in health services research, department of primary health care, Tim Peters, reader in medical statistics, department of social medicine**

*University of Bristol, Bristol BS8 2PR*

*Department of Psychiatry, St George's Hospital Medical School, London SW17 0RE*

*Redcrest, Heath Rise, Camberley, Surrey GU15 2ER*

**EDITOR**—Bloom's editorial is a surprising contribution to the important discussion about how best to improve compliance with treatment in chronic diseases.<sup>1</sup> His assertion that fewer daily doses increase compliance, and his notion that the least expensive drugs are usually the least effective and have the highest rate of side effects, cannot go unchallenged.

Bloom cites one of his own studies, funded by a pharmaceutical company, to support the idea that fewer daily doses improve compliance.<sup>2</sup> This study was a retrospective analysis of prescription records, which showed higher rates of prescription refill at one year among those treated with once daily versus more frequent dosing and those treated with newer, more expensive drugs. The study was confined to supposedly hypertensive patients younger than 71, but no initial blood pressure values were available, and none of them was evaluated in a standardised manner. Moreover, no blood pressure values, non-pharmacological interventions used, side effects, or reasons for stopping treatment were recorded.

Allocation to different drugs was at the discretion of the physician. During the study period, physicians and patients became increasingly aware of the limited benefits of treating mild hypertension in younger patients. Furthermore, it might be expected that a new drug undergoing postmarketing surveillance would be more likely to be continued if financial benefits accrued to the prescriber. Most serious investigators would have been deterred from using such a dataset to tackle the question of compliance, and it is telling that in discussing his findings, Bloom cites one of the landmark trials from the United States in the treatment of hypertension (the hypertension detection and follow up programme) as being from the United Kingdom.

We reviewed the literature on compliance with antihypertensive drugs from 1966 to 1996 and have

recently updated our work.<sup>3</sup> To our knowledge, at least six randomised controlled trials have investigated the effects of dosing schedules on compliance, with conflicting results.

The notion that the least expensive drugs are the least effective would be a convenient marketing strategy for the pharmaceutical industry, but it is untrue in the two areas Bloom considers. Low dose thiazide diuretics are as effective as more expensive antihypertensive drugs and have a better side effect profile than newer drugs.<sup>4 5</sup> For osteoarthritis a recent Cochrane systematic review has reported that paracetamol (acetaminophen) is as effective in relieving pain as newer and more expensive non-steroidal anti-inflammatory drugs.

Improving compliance is important—and will undoubtedly involve balancing considerations of efficacy, side effects, and convenience—but better clinical practice will result only from rigorous evaluation of all the available evidence.

## References

- 1.Bloom BS. Daily regimen and compliance with treatment. *BMJ* 2001; **323**: 647. (22 September.)
- 2.Bloom BS. Continuation of initial antihypertensive medication after 1 year of therapy. *Clin Ther* 1998; **20**: 1–11.
- 3.Ebrahim S. Detection, adherence and control of hypertension for the prevention of stroke: a systematic review. *Health Technology Assessment* 1998; **2**: 1–78.
- 4.Hansson L, Lindholm LH, Ekbom T, Dahlöf B, Lanke J, Schersten B, et al. Randomised trial of old and new antihypertensive drugs in elderly patients: cardiovascular mortality and morbidity in the Swedish Trial in old patients with hypertension-2 study. *Lancet* 1999; **354**: 1751–1756.
- 5.Philipp T, Anlauf M, Distler A, Holzgreve H, Michaelis J, Wellek S. Randomised, double blind, multicentre comparison of hydrochlorothiazide, atenolol, nitrendipine, and enalapril in antihypertensive treatment: results of the HANE study. HANE Trial Research Group. *BMJ* 1997; **315**: 154–159.

## Concordance respects beliefs and wishes of patients

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**Bryan Lask, professor of child and adolescent psychiatry**

*University of Bristol, Bristol BS8 2PR*

*Department of Psychiatry, St George's Hospital Medical School, London SW17 0RE*

*Redcrest, Heath Rise, Camberley, Surrey GU15 2ER*

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EDITOR—It was ironic to read in the same issue of the *BMJ*, Bloom's editorial on compliance and Moscrop's news item, in which he reported that chronically ill patients will have more say in managing their disease.<sup>1 2</sup> Bloom insists on using the term "compliance," with all its implications that patients should do as their doctor orders them.<sup>3</sup> He discusses the epidemiology of compliance and the cost of drugs. Nowhere does he refer to the right and need of patients to make their own decisions about their health care or to the reasons why they so often do not adhere to their doctor's advice.

Of course patients will continue to manifest poor adherence to treatment so long as some doctors maintain the attitude that patients should do as we tell them, implicit in the persistent use of compliance,