

# Waiting for the Great Leap Forward

*'Science and technology multiply around us. To an increasing extent they dictate the language in which we speak and think. Either we use these languages, or we remain mute.'*<sup>1</sup>

JG Ballard

IN late January of this year, the UK Council of the RCGP approved plans to publish the *Journal* on-line with a major electronic publisher, HighWire Press, the electronic imprint of Stanford University Libraries, Stanford, California. By the end of this year the *Journal* will be full text on-line linked to all 150 or so other journals in the HighWire portfolio and to effective search engines, such as MEDLINE.

Why are we so excited at this development? Anyone who has accessed electronic versions of other journals, such as the *British Medical Journal* or the *Lancet*, will already be familiar with some of the advantages that the *BMJ* has detailed enumerated.<sup>2,3</sup> They include the very rapid move towards electronic media among the world's libraries, so that it will become increasingly difficult for any paper-only periodical to maintain a position as a journal of record. It is only a matter of time before electronic journals take over from paper journals as the official archive. The change enables authors and editors to publish more; so that, for instance, the raw transcripts of qualitative studies can be made available to all. Paradoxically, the *Journal* will become available to more primary care professionals in the Third World, and more rapidly.

Above all we are sure it will improve the service to existing readers of the *Journal*. The *Journal* will be more accessible than previously — at computer terminals globally today and mobile communication devices tomorrow. The *Journal* will also enjoy unprecedented links to other journals and to medical search engines and other electronic resources.

However, there are more immediate benefits, especially for those who want nothing to do with electronic media. A criticism frequently directed at the *Journal* is that 'there's nothing there for the ordinary GP'.<sup>4</sup> Our response is that there is plenty here for the ordinary GP (whoever that is) endowed with intellectual curiosity, a sense of professional duty to keep abreast of developments, and a modicum of time and energy. The difficulty is that the language of science can make the papers impenetrable.<sup>5</sup> One of our aims is to use the additional — almost infinite — space of an electronic *Journal* to free the paper *Journal* from data sludge and leave the message clearer to readers. For instance, on page 203 of this issue, Sheikh and Hurwitz describe their experience of discovering a potentially alarming rate of psychological morbidity among practice managers. If you want to question the basic findings you will have to engage with the science. However, if you accept the findings, then many other questions arise. The first and most obvious: is your manager among the 47% showing some sort of mental distress? Does it apply to other members of your staff? Does it happen because of the isolated position many managers find themselves in? What, then, should we do about it? Do you agree with Sheikh and Hurwitz that this makes a case for an Occupational Health Service in primary care? Or (back to the science again) do you agree with Iona Heath that something has gone wrong with the way that we measure or categorise mental illness?<sup>6</sup> Creating the space to add such comments to many of the published papers will allow us to engage 'ordinary GPs' more effectively in the important research that remains the core of the *Journal's* content, and in a way that

readers could even find enjoyable.

Secondly, we hope that it will change the way in which readers (and authors) interact with the *Journal*. Take the Letters pages, for example — general practitioners in the UK are a wonderfully disparate lot: opinionated, talented, argumentative, conciliatory, and bloody-minded; and yet the *Journal* for the most part fails to reflect such characteristics. David Sackett has memorably written of being '...convinced that the offended British general practitioner has no equal in the articulation of outrage',<sup>7</sup> but articulate outrage within our pages has been conspicuous by its absence. The Letters page of the *Journal* should be (but is not) a riotous mixture of sweet reason, bile, and invective. With an electronic *Journal*, there is potential scope for updating the Letters pages at least once a week. The opportunity for more rapid publication may help to transform the Letters page into something simultaneously more interesting, amusing, and enlightening.

The benefits will not be limited to researchers and readers. Other stakeholders include planners, other primary care professionals, and patients, either as individuals or as members of special interest groups. The much greater flexibility of the electronic *Journal* will force us to consider how we can answer their different needs.

What are journals actually for in this new environment? Why do — and why should — journals exist? Journals act as sieves, as guarantors of quality.<sup>8</sup> In a new environment where information is dizzyingly available, doctors and their patients need reputable guides, and good on-line journals can guide through a complex maze. Journals can build on traditional models of peer review, exploit the speed and global reach of the Internet to make peer review more effective, and be less constrained by the restrictions of a tired database. Journals can exploit the Internet to maximise the benefits of editorial input (which, as editors, we rather value) and ensure that readers, authors, and patients are involved in the its production as never before. Publishing deadlines, that fearsome enemy of spontaneity, become less relevant.

For the future, we do not think that the paper *Journal* is going to become extinct. *BMJ* readership surveys suggest that their readers continue to like reading the hard copy, not least because the evidence shows newsprint to be easier to read than dots on the screen. Where else shall we be in a few years time? Consider the physics community where, for 10 years or so, original thoughts have been posted to a server in Nevada, displayed to the physics community for review and dissection, and refined in cyberspace until theories are disproved or accepted.<sup>9</sup> This may become standard practice for biomedical journals in the near future. The most exciting thing is that we just simply do not know.

With the electronic *Journal*, we have been considering two possible strategies. Firstly we would like to construct our new site in the coming months as publicly as possible. The electronic *Journal* is a considerable undertaking for the *Journal* itself and for the College, and we want to let readers see how the enterprise progresses and give us constructive feedback. We shall also have to make decisions about content and style over the next few months. In order to ensure that this is not the preserve of the insiders the ideal solution would be to assemble a (mostly virtual) working party, consisting of one or two sceptical, slightly technophobic (must use email but no further expertise

required) members of the College who read the *Journal* at least occasionally. Enquiries will only be accepted by e-mail; if we get too many we would select by means of electronically-generated random numbers. No financial reward, but excitement guaranteed.

It is now more than 25 years since Ballard, quoted above, warned that eschewing new technology would render us mute. The electronic *Journal* will ensure that our *Journal* has a voice in a new age.

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## Useful internet sites

HighWire Press	<a href="http://intl.highwire.org/">http://intl.highwire.org/</a>
<i>British Medical Journal</i>	<a href="http://www.bmj.com">http://www.bmj.com</a>
<i>The Lancet</i>	<a href="http://www.thelancet.com">http://www.thelancet.com</a>

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# A scandal of inaction: how to help GPs implement evidence-based health promotion

**B**URGEONING consumerism, rapidly escalating patient expectations, relentlessly increasing accountability, and the growth of evidence-based medicine have combined to put general practitioners (GPs) into the hot seat of clinical decision-making. Moreover, there has been an exponential increase in the volume and sources of information available to practitioners and patients, compounding the difficulties of providing effective care. Currently, practitioners obtain information from textbooks, journals, colleagues, patients, postgraduate meetings, mailings from the Department of Health, National Health Service (NHS) Executive, health authorities, the Health Education Authority, the National Centre for Reviews and Dissemination, patient organisations, charities and local hospitals, and evergrowing electronic databases such as the Cochrane Updates on Disk,<sup>1</sup> PRODIGY,<sup>2</sup> electronic British National Formulary,<sup>3</sup> eMIMS,<sup>4</sup> and numerous websites. GPs need concise, readily accessible, evidence-based knowledge. Nowhere is this more critical than in the area of health promotion, which has become a key component of modern clinical practice.

Worldwide it has been estimated that tobacco smoking causes about three million deaths annually.<sup>5</sup> Alcohol misuse is thought to be responsible for a further two million deaths per year.<sup>5</sup> Brief advice in a medical setting can lead to about a 60% relative increase in long-term smoking cessation rates when compared with a control group, and brief interventions in primary health care can reduce alcohol consumption by up to 25%. These encouraging figures are included in a recently published World Health Organisation (WHO) report from a meeting on lifestyles and behavioural change in primary health care.<sup>6</sup> The participants considered the scientific evidence for the effectiveness of primary care-based interventions and strategies to implement such interventions in the four areas of smoking, alcohol, diet, and exercise. These findings add further weight to the extensive body of evidence, which has been accumulating internationally over

recent years, on the potential of primary care-led health promotion to benefit patients and to reduce the burden of disease.<sup>7-11</sup> In addition, many of these substantive reports have also discouraged ineffective health promotion activities — such as screening for skin cancer — thus focusing efforts on those proven to produce tangible benefits.

The inaction of health professionals, policy makers, and politicians in the face of such overwhelming evidence is both scandalous and yet another example of the enormous difficulties of getting evidence into practice. Why should this be? Clearly a number of factors are responsible, including bias towards treatment-based interventions, professional and political barriers, and lack of incentives to change.

Preventive interventions have always seemed relatively ineffective compared with treatments for established disease because, frequently, only a small fraction of the recipients of the intervention actually realise any benefit, thus driving down the average gain.<sup>12</sup> This bias towards treatment-based interventions has been challenged by recent work developing a framework for standardising gains in life expectancies from medical interventions, including preventive measures.<sup>12</sup> Although less than 10% of smokers advised to stop actually do so, those succeeding have a substantial health gain. For example, targeting 35-year-old smokers to quit would lead to a gain in life expectancy of 34 months for females and 28 months for males.<sup>13</sup> This compares very favourably with a gain in life expectancy of one to seven months for coronary artery bypass grafting or percutaneous transluminal angiography in men with single vessel coronary artery disease.<sup>14</sup>

A WHO questionnaire survey of over 2300 GPs in 16 countries identified four main barriers to preventive medicine:

1. unsupportive government health policies,
2. insufficient training,

3. lack of payment by government health schemes for preventive medicine, and
4. time constraints.<sup>15</sup>

How can these barriers be overcome? Policy shifts towards a more primary care-oriented or even primary care-led health service are underway in a number of countries<sup>16-19</sup> and should address some of these issues. In the United Kingdom, the recent emphasis on health improvement programmes, clinical effectiveness, and partnership with patients<sup>16,20</sup> offer considerable potential to advance this agenda. Issues of time constraints and insufficient training reflect the harsh realities of life in the frontline of clinical practice. These are issues that need to be addressed by the NHS Executive, the Department of Health, the General Practitioners Committee of the BMA, and the colleges of the medical profession. Developing the contributions of other primary care professionals, especially practice nurses, nurse practitioners, and health visitors, offers a way of circumventing the very real problem of time constraints. The WHO survey<sup>15</sup> also found that, in the case of alcohol misuse, one of the main perceived incentives to early intervention by GPs was evidence of its effectiveness. This is in keeping with a survey of Australian GPs' views on clinical guidelines that cited an evidence base as the most important factor in their deciding whether to follow the recommendations of a guideline.<sup>21</sup>

A way forward here would be to provide GPs with that evidence in a concise, readily-accessible, ranked list showing the potential of various preventive activities to reduce the disease burden of the community. Such an approach is consistent with recommendations for speeding up the implementation of research findings.<sup>22</sup> Disability-adjusted life years (DALYs) can be used to compare the burden of disability attributed to each of the medical outcomes for which the health promotional activity is designed to prevent.<sup>23</sup> The DALY unit is becoming widely used as a measure of the losses in health from various illnesses, both in terms of mortality and morbidity. It also allows the comparison of the relative importance of various illnesses in terms of both quality and quantity of life. Calculation of Australian specific DALYs has already been commenced by the Australian Institute of Health and Welfare (personal communication: Colin Mathers, 1999), and it is proposed that a DALY ranked list should be used as a tool for guiding disease prevention in general practice.

The combination of a new approach to standardising data on outcomes, policy shifts to more primary care-oriented health systems, addressing issues of time constraints, and the customising of evidence-based guidelines for GPs could provide the catalyst for converting evidence into practice and ending the scandal of inaction over health promotion.

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