Personal Paper

Keeping up to date

J M LONGMORE

British Medical Journal, 1979, 1, 1547-1548

Despair and consternation almost crush a doctor's curiosity as he watches the pile of medical information grow and grow. The doctor feels that it is his duty to keep up with it, but it all seems too much, whatever his specialty, and all the more so if he has no specialty. Some doctors give up altogether.

There was once a general practitioner, the story goes, who every summer lent his house to a faithful locum with generous instructions to use the tennis court, the swimming pool, the billiard table—anything. "Do what you like, except on no account are you to open the cupboard under the stairs. That and that alone is private." The locum obeyed these instructions year after year, but one summer, overcome by curiosity, he opened the forbidden cupboard and there, neatly arranged on shelves, were 30 years' worth of *Lancets*—all unopened. The variation on this old chestnut is that the journals were *BMJs*. His was an extreme case: most of us try a little harder to placate our consciences by at least reading the obituaries before discarding the journal we pay for or get free as part of our membership privileges.

This then, is the first lesson: a sense of duty on its own will not take a doctor very far. Keeping up to date must be fun, exciting, and productive. For self-help in keeping up to date Samuel Smiles has provided us with the following dictum: "System, economy, and efficiency."

System

The simplest way to keep up to date is to collect (and read) one of the monthly add-on series such as *Medicine*. Over a two-year span the whole of medicine (but not surgery) is reviewed, laboriously, bit by bit. I have tried this way and there are various disadvantages.

Firstly, although articles are grouped together by subject, they are all written by different authors, so there is no continuity. In a well-edited book there is scope to be both more concise and more elaborate. A good book, uncluttered by ambiguous quizzes and too-colourful advertisements, can really teach. Such books, however, are expensive and apt to date rather quickly.

Secondly, add-on series are too boring. Who wants to read all about cardiology or endocrinology for a whole month? The reader must either have a lecture to give or a difficult exam to pass to discipline himself to such a compartmentalised approach.

Thirdly, some journals such as *Medicine* do not have references (although this used not to be the case) and so will not even serve as works of reference. There is no way to find out whether what is said is true.

One way round these difficulties is to create a textbook that never goes out of date. The technique is to buy a book and bring out a new edition all of your own every week by adding notes, photocopies, and cut-out articles. This system of perpetual revision gradually produces

a medical scrapbook, full of charming illustrations (how to get out of the bath when frail) and erudite articles on immunology, and there are even entertaining pages where conflicting articles can be presented side by side (cornflakes causing and not causing Crohn's disease).

A book is as good as its index. This is particularly true of medical scrapbooks. When I started perpetual revision in 1975 I chose the book with the largest index to form the primordial husk of what was to become the scrapbook. This happened to be *A Companion to Medical Studies* (edited by R Passmore and J S Robson), but any book with wide coverage would serve. To prevent the book bursting with the knowledge added to it the book may have to be dissected into the sections from which it was bound. Each section should be labelled according to its last page number, and all the sections placed in order in a box. Unbinding a new book may sound a bit drastic, but once it is unbound it can grow in all directions, indefinitely. A further advantage is that the light, magazine-shaped sections are more portable than a heavy book. In this form you can read your medical scrapbook in an armchair, on a train, in the bath, or even in bed—an impossible luxury when reading heavy medical tomes, which tend to crush the chest.

Economy

Perpetual revision requires no great expense, no expensive filing cabinets, no on-line computer, and no librarian. Anyone can do it for himself and each person's scrapbook will be unique, reflecting one person's growing interests and amusements. The only equipment that is needed is a book, a scalpel, a cardboard box, and glue for sticking in the articles (Pritt is the cleanest and easiest to use).

Which journals are chosen to have their articles excised is purely a matter of taste. There is no reason when running a medical scrapbook to keep on having the same journal; it may be more entertaining to vary journals every year. Other sources of input to a scrapbook include photocopies from books or journals, newspaper articles, notes from seminars and refresher courses, and even thumbnail sketches of notable patients. Members of journal clubs will find the medical scrapbook an excellent repository for the articles and reports they receive from other members.

The greater the variety of inputs the more entertaining it is to consult your scrapbook. One way of finding out what articles are available is to glance through *Current Contents*, a weekly publication carrying the contents pages of a large number of medical journals. The table shows the various journals that I have used in compiling a medical scrapbook. They are arranged in order of value for money (price per article: two letters count as one article). Calculations are difficult, however, and prone to various errors. Subscription rates are variable,

Details of journals used in compiling medical scrapbook and keeping up to date

	No of articles per issue	Rate of issue	Scope	Price per article (pence)
<i>Lancet</i>	42	Weekly	7	0.92
<i>British Medical Journal</i>	50	Weekly	7	1.53
<i>Chinese Medical Journal</i>	13	Bimonthly	6	1.90
<i>New England Journal of Medicine</i>	21	Twice monthly	1	3.09
<i>Archives of Internal Medicine</i>	34	Monthly	3	3.30
<i>Hospital Update</i>	13	Twice monthly	6	7.69
<i>British Medical Bulletin</i>	19	Thrice yearly	2	22.80
<i>Medicine</i>	15	Monthly	2	33.33

Osler House, Radcliffe Infirmary, Oxford

J M LONGMORE, BA, medical student

some journals being free for various categories of doctors, and students can often get special rates. The scope of a journal is roughly indicated by counting the different sorts of articles. If a journal is just concerned with straight-forward medicine and surgery it scores zero on scope, but if it has articles on other topics, it scores accordingly.

Efficiency

Any system for keeping up to date must be easy to operate. It must be easy to put information in and easy to get it out. Most systems are good at one but not at the other. For example, if all you do is to subscribe to a journal or two it's easy to put information into your store: you just add your latest issue to the shelf. But it is hard to get information out. Even if the journal provides a good index it covers only a limited number of issues of that particular journal, so if you want to know what you have got on malaria you may have to consult many indexes. Alternatively, if you keep up to date by buying successive editions of well-known texts it is easy to retrieve information, provided they have good indexes, but there is no place for incoming information, which then gets tucked away and forgotten about.

The system of perpetual revision, explained above, gets round these difficulties by displaying together, in one place, all your information on, say, malaria, referred to by one index heading. By making additions to the index in the "husk" book you can refer to particular articles. Everything is together, all in one place. Adding to the husk index is

especially important when two interesting articles appear together on the same page (a rare conjunction). You would not normally think of consulting your section on pontine tumours to find out about tennis elbow, so if the articles appear on the same page the only access is through a suitably adapted index.

A weekly exercise

Sitting at my desk, once a week, with scalpel, glue, and the latest *BMJ* to hand, I take about an hour to bring out a new edition of *A Companion to Medical Studies*. It is important never to get behind: going through old issues is boring, and boredom is what undermines attempts to keep up to date. I throw away this week's *BMJ* this week, whether or not I have read it. It seems such a waste to throw it away without having read it that I usually do read it in time, and thereby, I fondly imagine, I keep up to date.

One objection to the medical scrapbook might be that it would expand very fast and soon become unmanageable. All I can say is that since 1975 my scrapbook seems to have advanced only 2 cm towards the end of its box. So there is no need to despair at the rate of increase of medical knowledge: it inches forward almost indiscernibly.

(Accepted 24 April 1979)

Personal Therapeutics

Insulin

P J WATKINS

British Medical Journal, 1979, 1, 1548-1550

A 14-year-old boy received the first injection of insulin in 1922 in Toronto, and R D Lawrence was first treated with insulin in London in 1923. Only short-acting soluble insulins were available until the 1930s, when protamine insulins were introduced (isophane and protamine zinc insulin), and in the 1950s insulin zinc suspension became available. The introduction of highly purified insulins in the 1970s has resulted in a bewildering number of insulins—no fewer than 18 are now available in the United Kingdom (table).

In this article I shall mention a selection of insulins for starting and maintaining treatment of insulin-requiring diabetics, but shall not consider emergency treatment. Insulin still needs to be given by subcutaneous injection, and experimental infusions of insulin intravenously or subcutaneously, implantable capsules of insulin, and oral insulin preparations are not yet suitable for routine use.

Aims of insulin treatment

Insulin is given firstly to save life and alleviate symptoms, and secondly to achieve the best possible control of diabetes with

blood glucose concentrations being maintained as near to normal as possible to minimise long-term complications. The first aim is relatively easy to attain, and in some elderly patients or in those who lack motivation or ability it is the only aim, because attempts at fine control are liable to cause disabling hypoglycaemia. In these patients a single daily injection of insulin will often suffice, but twice daily injections are usually needed to obtain very good diabetic control.

Insulin regimens

The rapid action of soluble insulin makes it the insulin of choice for initiating treatment in most of those with acute-onset diabetes, using two or more injections daily. For those less acutely ill it is often better to start treatment with a medium-acting insulin, either once or twice daily, since these insulins probably cause less abrupt swings of blood glucose concentration. Soon after diagnosis many patients with acute diabetes enter a stage of partial or more rarely complete remission, when quite small doses of almost any insulin are adequate to maintain good control. Sometimes insulin may even be withdrawn for a while—a practice that is not encouraged because after a few months the need for insulin is almost inevitable.

The best insulin regimen for maintaining good, long-term control is a mixture of a medium-acting insulin with a soluble insulin preparation taken morning and evening. During pregnancy, when even finer control is required, three injections may be needed—a soluble and medium-acting insulin mixture