How to appraise clinical guidelines

James P. Warner and Robert Blizard

Aims and method We critically appraised clinical guidelines for the use of antidepressants, using an evidence-based approach.

Results We were unable to identify recent guidelines. The appraisal tool we used failed to identify some of the difficulties now apparent when considering the validity and utility of guidelines.

Clinical implications Critical appraisal tools are useful in providing a framework for assessing published material, but run the risk of blinding us with their simplicity.

The principles of critical appraisal that underpin evidence-based medicine (EBM) can be applied to a diverse range of papers. Although the evidence-based approach is frequently used for papers on therapy and diagnostic tests, many other types of publication lend themselves well to the EBM process. Practice guidelines are "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances" (Anonymous, 1994). The implementation of guidelines has been shown to improve the process of health care delivery, although the effect on patient outcome is less compelling. Recent years have seen an increase in the number of clinical guidelines published, as well as some debate about the legal standing of these documents. Like most other publications, guidelines should not be taken to be valid and useful without a critical appraisal.

Use of clinical guidelines for antidepressant prescribing

Vignette

A middle-aged woman with a six-month history of a depressive disorder was referred by her general practitioner for advice about further management. The case raised some questions about the pharmacological management of depression. Given the variety of antidepressants now available, we felt that the choice of agent had become a complex issue. We sought published guidelines to aid us with the decision of which antidepressant to prescribe.

Question

In patients with depressive disorder are there adequate practice guidelines concerning the appropriate pharmacological treatment?

Literature search

The literature review was initially undertaken in Embase rather than Medline, as Embase tends to be better at identifying pharmacologically-based papers. Using the headings 'antidepressant agent' and 'practice guidelines', three papers were identified in 1996–97 but none of these appeared relevant. A further three were identified in 1994–95, but again these were not pertinent. Taking the search back to 1992–93 revealed no papers as 'guidelines', probably because this was not used as a subject heading term at that time. Next we did a textword search for 1992–93 using 'guidelines', which revealed 4323 papers. When combined with the 1510 papers on 'anti-depressant agent', 27 papers emerged including one British-based paper that appeared to address our question: 'Guidelines for treating depressive illness with anti-depressants. The statement from the British Association for Psychopharmacology' (Montgomery *et al*, 1993).

No further articles of interest were identified when the search was repeated on Medline using the medical subject heading 'depressive disorder', and limiting the articles to 'guidelines', or by combining 'depressive disorder' with a textword search on 'guidelines'.

Brief outline of the article

The paper began with a brief discussion of terminology of depression. The authors discussed the shifting terminology in this field, and the article focused on the treatment of 'depression' as understood by the clinician, rather than cases defined by diagnostic criteria. There followed an overview of the epidemiology of depression, suggesting that in the UK some 375 000 people a year have untreated

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"moderately severe depression". The authors stated that the response to antidepressants in controlled evaluations is approximately twice that of placebo over four to six weeks and between 70 and 80% of patients on antidepressants will ultimately improve. The efficacy of new antidepressants selective serotonin reuptake inhibitors (SSRIs) had been established in placebo controlled trials and in comparison with tricyclic antidepressants. The guidelines stated that long-term efficacy of SSRIs in reducing subsequent episodes of depression has also been established. Less cardio-toxic antidepressants should be used in those who are thought to be of suicide risk and sub-therapeutic doses should be avoided (although dose guidelines are not given). The authors conclude that 'new' antidepressants have real advantages in practical terms in the treatment of depression. They are safer and their better tolerability makes them easier to reach an effective dose and because they are better tolerated patients are more willing to continue taking medication, improving their chances of response. The guidelines suggested that treatment should continue for at least four months at full antidepressant dose.

Critical appraisal of a clinical guideline

Sackett *et al* (1997) define clinical guidelines as "user friendly statements that bring together the best external evidence and other knowledge necessary for decision making about a specific health problem". We appraised the guidelines here using the suggestions of the EBM working group (Haywood *et al*, 1995; Wilson *et al*, 1995).

Are the recommendations valid?

Were all important options and outcomes considered? The authors discuss side-effects, compliance, toxicity and safety in overdose of the various antidepressants. They suggest caution with regard to the SSRIs because of the paucity of long-term clinical experience. Other pharmacotherapeutic options such as lithium and other mood stabilisers were not considered in this paper.

Was an explicit and sensible process used to identify selecting and combining evidence? No. There were only 15 references altogether in these guidelines and the authors did not appear to have systematically appraised all the evidence. To a certain extent there is conflict between making a series of guidelines user friendly by not overwhelming the reader with the evidence underpinning the guidelines and on the other hand providing the evidence to enable the reader to make a judgement as to how good the guidelines are.

Was an explicit and sensible process used to consider the relative value of different outcomes? Not really. Although certain outcomes can be easily measured (e.g. the improvement in mood state in antidepressant treatment), the utility of other outcomes (i.e. the meaning that has for the patient) varies considerably from individual to individual. For example, some individuals may not view the presence of anticholinergic side-effects as important as recovering from depression, others may. The guidelines reviewed here did not explore the relative value of different outcomes.

Is the guideline likely to account for important recent developments? There is a paucity of cited evidence in this publication; only one reference is published after 1990. However, the paper does make reference to paroxetine, fluvoxamine and sertraline, so given that it was published in 1993 it was relatively up-to-date. Since the publication of these guidelines there have been many more antidepressants introduced, including venlafaxine, reboxetine and mirtazapine. In summary, therefore, the guidelines probably were reasonably up-to-date at the time of publication but not now.

Has the guideline been subject to peer review and testing? The *Journal of Psychopharmacology* is a peer reviewed journal and many of the authors are established and respected authorities in psychopharmacology. One would assume that the paper had been subjected to external peer review.

What are the recommendations?

Are practical clinically important recommendations made? Yes. The main message of this paper is to underline the fact that patients with depression need treatment, they need it at adequate doses and for a long enough period of time.

How strong are the recommendations? The recommendations are reasonably strong without being didactic. The reader is left with the impression that SSRIs may be preferable to the tricyclic antidepressants but the paper is not overbearing in its recommendations.

What is the impact of uncertainty associated with the evidence and values used in the guidelines? The authors have uncritically accepted the evidence underpinning the use of antidepressants in controlled and open evaluations. No mention is made of the concerns about exaggeration of the treatment effect because of unblinding in double-blind randomised-controlled trials of antidepressants as a result of the use of

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non-active placebos (Moncrieff *et al*, 1998). However, this issue was not topical at the time of publication.

Will the recommendations help me in caring for my patient?

Is the primary objective of the guideline consistent with my objective? Yes. This guideline clearly addresses the question of treating depression with antidepressants.

Are the recommendations applicable to my patient? Yes. In this case we may feel confident in proceeding with a course of either tricyclic antidepressants or SSRIs at the full dose.

Comment

The guidelines appraised here were a readable and helpful document on the treatment of depressive illness with antidepressants. They are now out-of-date as there have been many new developments in antidepressant treatments since they were published and a lot more experience has been gained with SSRIs. Although, these guidelines suggest SSRIs are better tolerated than tricyclic antidepressants, meta-analyses comparing discontinuation rates of these compounds have had differing conclusions (Song *et al*, 1993; Anderson & Tomenson, 1995; Hotopf *et al*, 1997). Examination of these meta-analyses would be another interesting EBM exercise. The other relevant guideline on the treatment of depressive disorder in adults identified in our literature search was published by the American Psychiatric Association (1993). Given that our literature search failed to identify a more recent publication, the scope for answering our original question was limited.

Our appraisal tool could also be considered out-of-date and too simplistic. Guidelines published now should include a statement of the shelf-life, beyond which the recommendations should be revised or disregarded. The target populations for the guidelines should be specified. Furthermore, any conflict of interest of the authors and a statement of funding source for the guidelines should be made explicit.

The guidelines assessed here do not meet all the rigorous tests of validity outlined in the papers published by the EBM working party. This does not mean that the guidelines are not helpful. The past few years has seen an expansion of the knowledge and understanding of what constitutes a good publication. The main criticism of these guidelines is that they appear to represent a consensus statement of a group of psychopharmacologists rather than appraisal of all information at hand. The views of clinicians in primary care and patients are not considered.

If these guidelines were to be rewritten now, almost certainly they would be much longer, not only because of the expansion of knowledge but also because of the impact of evidence-based practices. Whether such a publication would be 'better' is perhaps more difficult to decide. Overall, we felt this exercise was helpful in learning how to appraise a set of guidelines, although the guidelines themselves were of limited use.

References

ANDERSON, I. M. & TOMENSON, B. M. (1995) Treatment discontinuation with selective serotonin reuptake inhibitors compared with tricyclic antidepressants: a meta-analysis. *British Medical Journal*, **310**, 1433–1438.

AMERICAN PSYCHIATRIC ASSOCIATION (1993) Practice guideline for major depressive disorder in adults. *American Journal of Psychiatry*, **150** (suppl. 4), 1–26.

ANONYMOUS (1994) Implementing clinical practice guidelines. *Effective Health Care*, **8**, 1–10.

HAYWARD, R. S., WILSON, M. C., TUNIS, S. R., *et al* (1995) Users' guides to the medical literature. VIII How to use clinical practice guidelines. A. Are the recommendations valid? *Journal of the American Medical Association*, **274**, 570–574.

HOTOPF, M., HARDY, R. & LEWIS, G. (1997) Discontinuation rates of SSRIs and tricyclic antidepressants: a meta-analysis and investigation of heterogeneity. *British Journal of Psychiatry*, **170**, 120–127.

MONCRIEFF, J., WESSLEY, S. & HARDY, R. (1998) Meta-analysis of trials comparing antidepressants with active placebos. *British Journal of Psychiatry*, **172**, 227–231.

MONTGOMERY, S. A., BEBBINGTON, P., COWEN, P., *et al* (1993) Guidelines for treating depressive illness with antidepressants. *Journal of Psychopharmacology*, **7**, 19–23.

SACKETT, D. L., RICHARDSON, W. S., ROSENBERG, W., *et al* (1997) *Evidence-Based Medicine*. New York: Churchill Livingstone.

SONG, F., FREEMANTLE, N., SHELDON, T. A., *et al* (1993) Selective serotonin reuptake inhibitors: meta-analysis of efficacy and acceptability. *British Medical Journal*, **306**, 683–687.

WILSON, M. C., HAYWARD, R. S., TUNIS, S. R., *et al* (1995) Users' guides to the medical literature. VIII How to use clinical practice guidelines. B. What are the recommendations and will they help you in caring for your patients? *Journal of the American Medical Association*, **274**, 1630–1632.

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