

Should depression be managed as a chronic disease?

Gavin Andrews

In 1970 L G Kiloh and I finished recruiting patients for a prospective study of depression in admissions to a new general hospital psychiatric unit. When we published the 15 year follow up we discovered that our patients had not done at all well.¹ Only a fifth recovered and remained continuously well, three fifths recovered but had further episodes, and a fifth either committed suicide or were always incapacitated. An English 15 year follow up study published at the same time showed identical results.² The obvious conclusion was that people admitted to hospital in the 1970s with a depressive illness did not have a good prognosis. In retrospect, I ask why more of those who relapsed did not return to us for treatment. These results are not atypical. A detailed 12 year follow up in US specialist care showed that patients on average had symptoms in 59% of weeks and met full criteria for a depressive episode in 15% of weeks.³ Depression seems to be a chronic recurring disorder, seldom well managed if one simply waits for the patient to initiate further consultations.

Methods

I identified references to remission and relapse of depression during the writing up of the Australian national mental health survey. References to long term prognosis came from my earlier work. A conference question, "What is the clinical implication of your findings?" led me to the Wagner model of chronic disease management.

Depression is treatable

In 1990 depression was the fourth most important determinant of the global burden of disease and the largest determinant of disability in the world.⁴ The burden of depression is not being reduced, partly because too many people do not seek treatment and partly because efficacious treatments are not used effectively.⁵ Neither good education of providers^{6 7} nor increased prescribing of antidepressants⁸ seems to reduce the burden. This has puzzled informed observers.⁹ There is good evidence from controlled trials of the efficacy of short term treatment,¹⁰ exactly as the drug advertisements suggest. Four types of antidepressant drugs, cognitive behaviour and interpersonal therapy, and electroconvulsive therapy have all been shown to produce benefits of 0.5 to 1.0 standard deviation over the response to placebo. However, most trials cover only short periods, just long enough to establish the acute

Summary points

The burden of depression is not being reduced

The episodic nature of depression and the acute response to treatment means that episodes seem easy to treat

They can be if patients comply with drug and cognitive therapy regimens

The main problem is the next recurrence, if patients do not come for treatment at all

To reduce the burden of depression, we argue for a chronic disease management model

We should manage depression proactively to ensure long term compliance with treatment

WHO
Collaborating
Centre for Mental
Health and, School
of Psychiatry,
UNSW at St
Vincent's Hospital,
299 Forbes Street,
Sydney, 2010,
Australia
Gavin Andrews
professor of psychiatry
gavina@crufad.
unsw.edu.au

BMJ 2001;322:419-21

response to treatment. The longest comparison trial of maintenance treatment is only three years.¹¹

The change in the placebo control group itself is considerable, greater than the additional improvement due to any specific treatment and probably the largest in any mental disorder.¹² This is in part because of the frequency of spontaneous remission and in part because of the sensitivity of depressed patients to the encouraging effects of being in treatment.¹³ These two factors, a large response to acute treatment and the short duration of many episodes without treatment, lead to the idea that depression should not be a disease of great burden. This optimism is ill founded.

Remission and relapse are common

Just what is the likelihood of spontaneous remission? Two wave prospective surveys are necessary to determine the duration of depressive episodes in the community. There are two such surveys,^{14 15} and both show that the median duration of depressive episodes was eight weeks (mean 16 weeks), with only 5% of people not recovered at one year. In the Australian mental health survey less than half the people with depressive episodes some time during the year had symptoms that met the criteria for depression during the month of the interview. Depression is a disorder that remits.^{5 16}

Depression also recurs. The people in the Australian survey who met criteria for depression during the

previous year dated the onset of their first episode an average of 5.4 years earlier (range 1-54 years). Nearly half (44%) reported a previous episode within 12 months of their latest episode, and 39% had met ICD-10 criteria (international classification of diseases, 10th revision) for a full remission between the two episodes. The US national comorbidity survey showed that three quarters of people aged 15-54 years who had ever met criteria for depression had had more than one episode.¹⁷ Their mean age was 34, and they reported an average of 11 prior episodes, each lasting from two to 69 weeks. In our twin study people with a lifetime history of depression reported an average of eight episodes in the 11 years since their first episode.¹⁸ The duration of episodes was similar to that reported in the US survey. Depression in the community remits and recurs, and the frequency of remission may lead clinicians to underestimate the probability of relapse.

Managing depression as a chronic disease

A model of practice in which patients seek help only when they deem it necessary is not appropriate for an episodic but lifelong condition that affects hope and volition, reduces compliance, and predisposes to suicide. Would it be better managed by a chronic disease management model like that used for diabetes? But even that is difficult. Consider a person recovering after 12 months of despair, loss of energy, weight loss, and insomnia. At the point of recovery, few doctors would want to broach the issue of chronicity, and few patients (we used to think) would want to hear about it. Yet if the diagnosis was diabetes there would be instant discussion of the chronic nature of the disorder and the steps needed to manage it.

Wagner et al described a model for the management of chronic disease and gave examples of the changes to usual practice needed.¹⁹ Katon et al have applied this model to depression to prevent chronicity and relapse, the principal determinants of burden.²⁰ There seem to be four components.

Practice reorganisation—Establish a register of cases and proactively organise consultations, seeing people frequently during an acute phase and less frequently during remissions.



Depression is the largest determinant of disability in the world

Patient education—Use booklets, videotapes, and family consultations to educate patients and their families about the signs and symptoms of depression, about antidepressant drugs, about psychological approaches to aid recovery, and about early warning signs that herald relapse.

Expert systems—Have clinical practice guidelines for diagnosis and for management of acute episodes, maintenance, and relapse. Establish criteria for specialist consultation and for sharing care with psychologists and nurses.

Computer support—Produce a package that records treatment and outcome measures and flags when progress is not as expected.

Does this work?

Enhanced treatment of acute episodes in accord with the Wagner criteria produced better outcomes in depressive patients treated in primary care, but a year later the outcomes were no better than with usual care.²¹ The authors concluded that continued enhanced care was required, which is not surprising given the chronic nature of the disorder. Is this feasible? Quite apart from the burden of disease, persistence of chronic conditions produces direct treatment costs. People with depression generate twice the healthcare costs of other primary care attenders, high even after the impact of comorbid conditions is controlled.²² Proactive care costs more than usual care, but the cost per patient successfully treated is lower, and the cost effectiveness higher, than for patients given usual care.²³ Proactive care for people with subsyndromal depression was not found to be cost effective, which means that the cost profiles of strategies for maintenance and prevention of relapse need to be improved,²⁴ perhaps by consultations by ancillary staff or by interactive voice response telephony, and compared with the gains possible from use of funds for other conditions.

Is being so proactive fair?

Managing depression as a chronic disorder raises three questions for which there are no conclusive answers. Firstly, how do patients respond when told their disease is likely to recur? Many doctors are concerned that telling people the true prognosis will cause their depression to worsen. This belief seems to be widely held and certainly needs research. At this centre we have begun to be more honest with people about their prognosis. This takes time, but we have had no complaints and compliance has improved. "This is the first time I have understood the importance of treatment," is the usual response we get from patients. People have a right to the truth.

Secondly, how do you identify the people likely to relapse? About half of a community sample of people who have recovered from depression will relapse within a year, and most will relapse within two years. Clinical practice guidelines suggest that maintenance treatment be deferred until the second or third episode.^{25 26} People seldom seek help for their first attack of depression, only for subsequent attacks, although good interviewing and good rapport may be required to elucidate the earlier episodes. The first

treated episode is often the third or fourth actual episode. Again research is needed.

Lastly, how do we know that a proactive chronic disease model is better than the present "laissez-faire" model. We, like the Seattle group,³⁰ have adopted a proactive approach to management of current illness. When people do not take their drugs, implement their pleasant event activities, use problem solving, or attend for appointments we ask why. Whether such proactive care works in the longer term is simply unknown, and research is needed. However, we think anything is better than leaving patients to languish at home, too dysphoric and anergic to seek help.

Depression and diabetes are alike in burden, and both have chronic courses marked by periods without symptoms and by occasional emergencies. The UK prospective diabetes study showed the effectiveness of intensive follow up in preventing long term complications in diabetic patients.²⁷ There has been no equivalent study in depression, and, given the promise of the work by the Seattle group, the time is ripe for such a long term prospective study. We must encourage research into efficient strategies for long term treatment and prevention of relapse in depression. After all, it is the largest single cause of disability in the world.

Competing interests: None declared.

- Kiloh LG, Andrews G, Neilson MD. The long term outcome of depression. *Br J Psychiatry* 1988;153:752-7.
- Lee AS, Murray RM. The long-term outcome of Maudsley depressives. *Br J Psychiatry* 1988;153:741-51.
- Judd LL, Hagop SA, Maser JD, Zeller PJ, Endicott J, Coryell W, et al. A prospective 12 year study of subsyndromal and syndromal depressive symptoms in unipolar major depressive disorders. *Arch Gen Psychiatry* 1998;55:694-700.
- Murray CJL, Lopez AD. Alternate projections of mortality and disability by cause 1990-2020: global burden of disease study. *Lancet* 1997;349:1498-504.
- Andrews G, Sanderson K, Slade T, Issakidis C. Why does the burden of disease persist? Relating the burden of anxiety and depression to effectiveness of treatment. *Bull World Health Organ* 2000;78:446-54.
- Rix S, Paykel ES, Lelliott P, Tylee A, Freeling P, Gask L, et al. Impact of a national campaign on GP education: an evaluation of the defeat depression campaign. *Br J Gen Pract* 1999;49:99-102.
- Thompson C, Kinmonth AL, Stevens L, Peveler RC, Stevens A, Ostler KJ, et al. Effects of a clinical practice guideline and practice based education on detection and outcome of depression in primary care. *Lancet* 2000;355:185-91.
- Donoghue J. Selective serotonin reuptake inhibitor use in primary care—a 5 year naturalistic study. *Clin Drug Invest* 1998;16:453-62.

- Wright AF. Through a glass darkly: understanding depression. *Br J Gen Pract* 1999;49:91-2.
- Nathan PE, Gorman J, eds. *A guide to treatments that work*. Oxford: Oxford University Press, 1998.
- Frank E, Kupfer DJ, Perel JM, Cornes C, Jarrett DB, Mallinger AG, et al. Three year outcomes for maintenance therapies in recurrent depression. *Arch Gen Psychiatry* 1990;47:1093-9.
- Andrews G. The placebo response in depression: bane of research, boon to therapy. *Br J Psychiatry* (in press).
- Enserink M. Can the placebo be the cure? *Science* 1999;284:238-40.
- Kendler KS, Walters EE, Kessler RC. The prediction of length of major depressive episodes: results from an epidemiological sample of female twins. *Psychol Med* 1997;27:107-17.
- McLeod JD, Kessler RC, Landis KR. Recovery from major depressive episodes in a community sample of married men and women. *J Abnorm Psychol* 1992;101:277-86.
- Andrews G, Henderson S, Hall W. Prevalence, comorbidity, disability and service utilisation: and overview of the Australian national mental health survey. *Br J Psychiatry* (in press).
- Kessler RC, Zhao S, Blazer DG, Swartz M. Prevalence, correlates and course of minor depression and major depression in the national comorbidity survey. *J Affective Disord* 1997;45:19-30.
- Andrews G, Stewart G, Allen R, Henderson AS. The genetics of six neurotic disorders: a twin study. *J Affect Disord* 1990;19:23-9.
- Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Millbank Q* 1996;74:511-43.
- Katon W, Von Korff M, Lin E, Unutzer J, Simon G, Walker E, et al. Population based care of depression: effective disease management strategies to decrease prevalence. *Gen Hosp Psychiatry* 1997;19:169-78.
- Lin EHB, Simon GE, Katon WJ, Russo JE, Von Korff M, Bush TM, et al. Can enhanced acute phase treatment of depression improve long term outcomes? A report of randomized controlled trials in primary care. *Am J Psychiatry* 1999;156:643-5.
- Simon GE, Von Korff M, Barlow W. Health care cost of primary care patients with recognized depression. *Arch Gen Psychiatry* 1995;52:850-6.
- Von Korff M, Katon W, Bush T, Lin EH, Simon GE, Saunders K, et al. Treatment costs, cost offset, and cost-effectiveness of collaborative management of depression. *Psychosom Med* 1998;60:143-9.
- Sturm R, Wells KB. How can care for depression become more cost effective? *JAMA* 1995;273:51-8.
- Depression Guideline Panel. *Depression in primary care. Vol 2. Treatment of major depression*. Rockville, MD: US Department of Health and Human Services, 1993. (Clinical practice guidelines, No 5. AHCPR Publication No 93-0551)
- American Psychiatric Association. *Practice guidelines for major depressive disorder in adults*. Washington DC: American Psychiatric Association, 1996.
- Nathan DM. Some answers, more controversy, from the UKPDS. *Lancet* 1998;352:823-33.

(Accepted 25 October 2000)

Correction

Results of genetic testing: when confidentiality conflicts with a duty to warn relatives

An error in the electronic production process caused the reference list in this article by Leung (9 December, pp 1464-5) to be missing. It will be found on the *BMJ* website (www.bmj.com/cgi/content/full/321/7274/1464).

The importance of patient confidentiality

As a third year medical student just starting out in clinical medicine, the importance of patient confidentiality has often been emphasised to me. Unfortunately, until now, it is something that I have not considered in detail. I am probably guilty of the odd Friday night pub conversation: "You won't believe what I saw today." I am sure many of my fellow colleagues would be guilty of the same.

But while I was completing my special study module on domestic violence my eyes were opened. My tutor asked me to contact several victims of violent domestic abuse who had been treated in the accident and emergency department. I obtained telephone numbers from patient records. Some individuals, however, had omitted to leave their number. I contacted directory inquiries only to discover that they were not listed. This suggested that these people had no wish to be contacted.

At my tutor's request, I contacted the practices where the victims were patients. The receptionists at all six practices freely gave out the numbers I required without asking for any proof of identity. I was shocked at how easily I could obtain information

that was obviously not meant for public knowledge. It was more worrying as the cases involved domestic violence.

Some of the victims may have been withholding telephone numbers to try to create a barrier between themselves and their violent ex-partners. Would they be happy to know that they were so easily accessible? The receptionists concerned had no proof that they were speaking to a medical student with no harmful intentions. Perhaps we should all give a little more thought to patient confidentiality.

Lucy Mansfield *third year medical student, St George's Hospital Medical School*

Reprinted from *studentBMJ* November 2000

We welcome articles of up to 600 words on topics such as *A memorable patient, A paper that changed my practice, My most unfortunate mistake*, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to.