# Is depression overdiagnosed?

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YES It is normal to feel depressed. In our study of 242 teachers, the 1978 baseline questionnaire defined depression as "a significant lowering of mood, with or without feelings of guilt, hopelessness and helplessness, or a drop in one's self-esteem or self-regard."[1] Ninety five per cent reported such feelings (with a mean of six episodes a year), showing the ubiquitous nature of a depressed mood.

A low threshold for diagnosing clinical depression risks treating normal emotional states as illness, challenging the model's credibility and risking inappropriate management. When the first antidepressant (imipramine) was developed, manufacturer Geigy was reluctant to market it,[2] judging there were insufficient people with depression. Now, antidepressant drugs have a large share of the drug market. Reasons for the overdiagnosis include lack of a reliable diagnostic model and marketing of treatments beyond their true utility in a climate of heightened expectations.

Fifty years ago, clinical depression was either endogenous (melancholic) or reactive (neurotic). Endogenous depression was a categorical biological condition with a low lifetime prevalence (1-2%). By contrast, reactive depression was exogenous—induced by stressful events affecting a vulnerable personality. In 1980, the American Psychiatric Association promoted the third revision of its diagnostic and statistical manual (DSM-III) as a reliable criterion based system. It divided clinical depression into major and minor disorders.

The gravitas of the term "major depression" gave it cachet with clinicians (despite unpublished trials saying diagnostic allocation was less reliable than that in DSM-II[3]) and helped patients get medical insurance cover.[4] Although its descriptive profile prioritised melancholic features (such as serious psychomotor disturbance or anergia), DSM-III's operational criteria were set "at the lowest order of inference." Criterion A required a "dysphoric mood" for two weeks, including feeling "sad, blue …down in the dumps." Criterion B (mandating four of eight listed items) could be met by appetite change, sleep disturbance, drop in libido, and fatigue. Trials confirmed the low reliability of these criteria,[4] and studies showed variable lifetime prevalences—ranging from 6.3%[5] to 17.1%[6]—that paradoxically fell with age. Why? Failure to recall lifetime episodes was shown to be greater for major depression than for other disorders,[6] suggesting that its criteria capture less important (and forgettable) depressive states. Studies that assess cohorts at intervals to overcome forgotten episodes report much higher lifetime rates of major depression (such as 42% in our teachers' cohort[7]).

Minor DSM-III depressive disorder (dysthymia) homogenised less severe chronic conditions, requiring even fewer and less substantive symptoms such as crying, decreased productivity, and feeling sorry for yourself. This model was extended by proposing a less severe condition, subsyndromal or subclinical depression. Its one year prevalence in a US community database was nearly triple that of major depression, encouraging those investigators to argue for its "clinical and public health importance" and treatment.[8]

### How low do we go?

Determining caseness for any dimensional construct requires imposing a cut-off, risking underdiagnosis of true cases or overdiagnosis of non-cases. By 1993, 79% of teachers in our cohort had met the criteria for major, minor, or subsyndromal depression (unpublished data). Although it was necessary to redress psychiatry's earlier weighting to melancholia, the dimensional model risks medicalising normal human distress and viewing any expression of depression as mandating treatment.

**Depression will remain a "catch all" diagnosis until common sense prevails**

That many people with substantive clinical depression do not have their condition diagnosed does not mean that depression is underdiagnosed. Such boundary concerns have parallels. For example, the diagnosis of attention-deficit/hyperactivity disorder is often missed; conversely, it is often falsely diagnosed in children with other disruptive behaviours.

### Does overdiagnosis matter?

Does current looseness matter if a low diagnostic threshold destigmatises depression, encouraging people to seek help? After all, breast screening programmes may lead to detecting more malignant lumps. However, false positives results generated by breast screening are filtered out by refined assessment, and harm rarely occurs. For false positive detection of depression, many of psychiatry's leaders mandate treatment, which for those with less severe conditions raises hopes but results in ineffective and inappropriate treatments.

The ease of diagnosing clinical depression has rebounded on psychiatry, blunting clarification of causes and treatment specificity. As Hickie, who argues here against overdiagnosis, observed elsewhere: DSM-III defined major depression has failed "to demonstrate any coherent pattern of neurobiological changes or any specific pattern of treatment response outside in-patient treatment settings."[9]

Meta-analyses show striking gradients favouring antidepressant drugs over placebo for melancholic depression. Yet trials in major depression show minimal differences between antidepressant drugs,[10] evidence based psychotherapies,[11 12] and placebo. The benefit of treatment for minor and subsyndromal depression is even more unclear. Extrapolating management of the more severe biological conditions to minor symptom states reflects marketing prowess rather than evidence.

Depression will remain a non-specific "catch all" diagnosis until common sense prevails. As American journalist Ed Murrow said: "Anyone who isn't confused doesn't really understand the situation."

**Competing interests:** GP is executive director of Australia's Black Dog Institute and has served on pharmaceutical advisory boards and spoken at meetings convened by drug companies.

OLGA LYUBKINA/FOTOLIA

Rates of diagnosis of depression have risen steeply in recent years. **Gordon Parker** believes this is because current criteria are medicalising sadness, but **Ian Hickie** argues that many people are still missing out on lifesaving treatment

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NO It is appropriate for the wider community to ask if the benefit of increased treatment of depression over the past 15 years has outweighed any harm. If increased treatment has led to demonstrable benefits, and is cost effective, then depression is not being overdiagnosed. From a health and economic perspective, we can give a clear answer—more adults are alive and well, and we can easily afford to treat more. Increased treatment of depression reduces suicides[1 2] and increases productivity.[3] The provision of appropriate medical and psychological care is also cost effective.[4]

The increased rate of diagnosis has had other benefits, including reduced stigma, removal of structural impediments to employment and health benefits, increased access to life insurance, improved physical health outcomes, reduced alcohol and drug misuse, and wider public understanding of the risks and benefits of coming forward for care.[5] We have at last abandoned the demeaning labels of stress, nervous breakdown, and adolescent angst. Most doctors can now differentiate normal sadness and distress from more severe clinical conditions. A new wave of neurobiological, genetic, and psychosocial risk factor studies has followed,[6] and informational and pyschological interventions delivered in person or through the internet now have wide appeal.[7] In turn, this has stimulated social psychiatrists to call for a renewed focus on societal determinants[8] and testing of preventive strategies in the postnatal, childhood, and adolescent periods.[5]

Health system reform, particularly in the US and Australia, has emphasised the use of collaborative teams that deliver high quality interventions and achieve desirable health, social, educational, and vocational outcomes.[9 10]

A new generation of health practitioners now recognise that clinical forms of anxiety and depression commonly exist outside of mental hospital environments. Without diagnosis of these conditions, we would still distance ourselves, our families, and our communities from the benefits of receiving mental health care.

The promotion of safer antidepressants in the 1990s was the catalyst for change. It challenged the categorical and specialist diagnostic systems. It also reawakened broader community interest in the experiences of people with depression and in how their lives are changed by drug or psychological treatments.[11] Population health studies that assess the effect of disability, increase emphasis on prevention and early intervention, and promote the benefits of treatment have resulted from these new perspectives.[12]

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## Caveats and concerns

Although those under 18 years old seem to benefit from psychological and drug treatments, the evidence is not as strong as for adults.[13] The resulting community concern should focus on whether drugs or psychological approaches are given as first line treatments. As with adults, among young people with more severe disorders the overall response to treatment is encouraging.[14]

Closer examination of prescribing[15] reveals other health promoting patterns. Although the number of prescriptions for antidepressants rose sharply during the 1990s, it now seems to have slowed. The use of new antidepressant drugs often results in reduced prescribing of less desirable sedatives such as benzodiazepines, as well as the more dangerous tricyclic antidepressants and monoamine oxidase inhibitors.[15] Although there has been much regulatory concern about increased prescribing of the new drugs,[13] there is little hard evidence of harm to a significant number of people. The real harm, as evidenced by the suicide statistics, comes from not receiving a diagnosis or treatment when you have a life threatening condition like depression.

Large general practice based audits in the UK, Australia, and New Zealand do not support the notion that depression is now overdiagnosed or treated exclusively with antidepressants. In fact, substantive personal, demographic, geographical, professional, training, and health system barriers remain in place. The net result is that diagnosis of major depression is largely restricted to people with severe or persistent disorders, those who present many times, those who request treatment, or those who attempt self harm.[16]

Although critics may be reassured by such findings, these low recognition rates should be quite concerning. Most major mental disorders start before the age of 25 years and result in lifetime reductions in productivity and quality of life.[17] Often the best opportunities for changing this course arise early and before secondary medical, health, educational, and social comorbidity develop. Persistent depression also seems to have specific and enduring effects on brain structure and resultant cognitive function.[18]

To respond to these trends, modern psychiatry needs a new clinical model[19] combining early intervention and clinical staging perspectives (like those that have been so successful in cancer care). If this happens, increased rates of diagnosis will be balanced by a move to more overtly dimensional models and less reliance on medical therapies—that is, those with less severe forms or in the early phases of illness will receive the least harmful informational and psychological strategies.

Evidence about the lack of care provided when young people present with psychological disorders to primary care[16 20] supports the public promotion of the benefits of these more dimensional diagnostic models. We will also need to push for greater access to informational and psychological treatments and concurrent monitoring for possible harms.

**Competing interests:** IH was chief executive officer and clinical adviser of beyondblue, the Australian national depression initiative. He has led projects for health professionals and the community supported by government, community agencies and drug industry partners on identifying and managing depression and anxiety. He has served on professional advisory boards convened by the drug industry in relation to specific antidepressants, including nefazodone and duloxetine.

References and full competing interests are on bmj.com

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