Is sadness an essential human emotion or is it time to banish it for good, asks **Jessica Marshall**

Woes be gone

WHY be miserable? OK, so it's January and you're feeling fat and broke after the excesses of the holiday season, but there's really no need. Misery is inconvenient, unpleasant, and in a society where personal happiness is prized above all else, there is little tolerance for wallowing in despair. Especially now we've got drugs for it.

Antidepressants can help banish sad feelings – not just the life-sapping black dog of clinical depression, but the rough patches that most people go through sometimes, whether it's after losing a job, the break-up of a relationship or the death of a loved one. So it's no surprise that more and more people are taking them (see graph, page 39).

But is this really such a good idea? A growing number of cautionary voices from the world of mental health research are saying it isn't. They fear that the increasing tendency to treat normal sadness as if it were a disease is playing fast and loose with a crucial part of our biology. Sadness, they argue, serves an evolutionary purpose – and if we lose it, we lose out.

"When you find something this deeply in us biologically, you presume that it was selected because it had some advantage, otherwise we wouldn't have been burdened with it," says Jerome Wakefield, a clinical social worker at New York University and co-author of *The Loss of Sadness: How psychiatry transformed normal sorrow into depressive disorder* (with Allan Horwitz, Oxford University Press, 2007). "We're fooling around with part of our biological make-up."

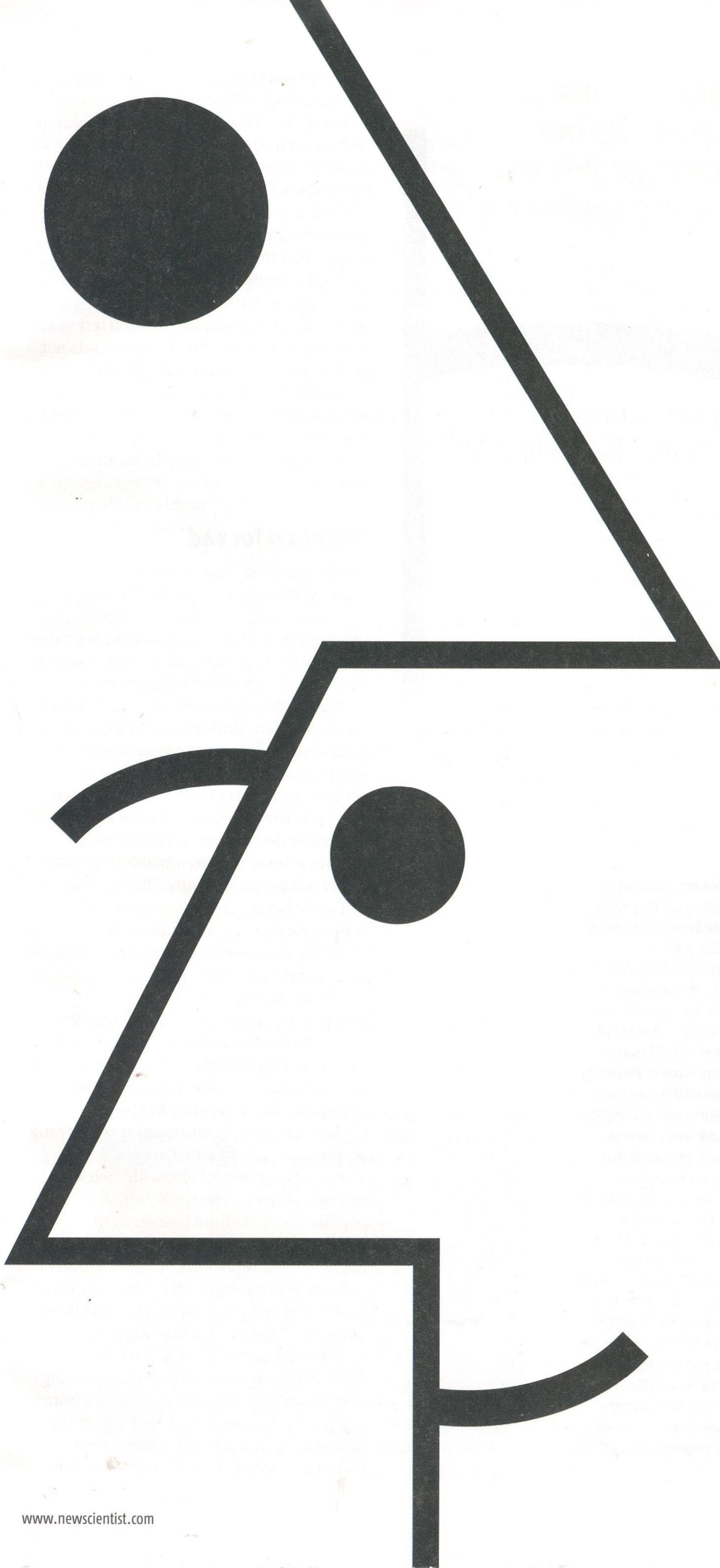
Perhaps, then, it is time to embrace our miserable side. Yet many psychiatrists insist not. Sadness has a nasty habit of turning into depression, they warn. Even when people are sad for good reason, they should be allowed to take drugs to make themselves feel better if that's what they want.

So who is right? Is sadness something we can live without or is it a crucial part of the human condition?

Hard evidence for the importance of sadness in humans is difficult to come by, but there are lots of ideas about why our propensity to feel sad might have evolved. It may be a self-protection strategy, as it seems to be among other primates that show signs of sadness. An ape that doesn't obviously slink off after it loses status may be seen as continuing to challenge the dominant ape – and that could be fatal.

Wakefield believes that in humans sadness has a further function: it helps us learn from our mistakes. "I think that one of the functions of intense negative emotions is to stop our normal functioning, to make us focus on something else for a while," he says. It might act as a psychological deterrent to prevent us from making those mistakes in the first place. The risk of sadness may deter us from being too cavalier in relationships or with other things we value, for example.

What's more, says Paul Keedwell, a psychiatrist at Cardiff University in the UK, even full-blown depression may save us from the effects of long-term stress. Without taking



time out to reflect, he says, "you might stay in a state of chronic stress until you're exhausted or dead". He also thinks that we may have evolved to display sadness as a form of communication. By acting sad, we tell other community members that we need support.

Then there is the notion that creativity is connected to dark moods. There is no shortage of great artists, writers and musicians who have suffered from depression or bipolar disorder. It would be difficult to find enough recognised geniuses to test the idea in a large, controlled study, but more run-of-the-mill creativity does seem to be associated with mood disorders. Modupe Akinola and Wendy Berry Mendes of Harvard University found that people with signs of depression performed better at a creative task, especially after receiving feedback that was designed to reinforce their low mood. The researchers suggest that such negative feedback makes people ruminate on the unhappy experience, which allows subconscious creative processes to come to the fore, or that it pushes depression-prone people to work harder to avoid feeling bad in the future (*Personality and Social Psychology Bulletin*, vol 34, p 1677).

Don't be happy, worry

There is also evidence that too much happiness can be bad for your career. Ed Diener, a psychologist at the University of Illinois in Urbana-Champaign, and his colleagues found that people who scored 8 out of 10 on a happiness scale were more successful in terms of income and education than 9s or 10s – although the 9s and 10s seemed to have more successful close relationships (*Perspectives on Psychological Science*, vol 2, p 346).

This could simply demonstrate that the happiest people are those who cherish close relationships over power and success, but it could also signal that people who are "too happy" lose their willingness to make changes to their lives that may benefit them. Medicating sadness, Keedwell suggests, could do the same – blunting the consequences of unfortunate situations and removing people's motivation to improve their lives. Giving antidepressants to people whose real problem is something else – a bad relationship, for instance – may allow the person to continue in an unhealthy situation instead of addressing the underlying problem.

Whether or not a little sadness is useful, everyone agrees that clinical depression is not. Unfortunately it's not clear exactly where to draw the line between the two (see "Sad or depressed?", page 39). So which is more dangerous: to over-medicate normal sadness, a feeling which may lead us to re-evaluate our lives after the loss of a ▶

"Should we use pills to speed up our emotional journey back to happiness?"

job or the end of a relationship, or under-medicate clinical depression?

Ian Hickie of the Brain and Mind Research Institute at the University of Sydney, Australia, insists that depression is not overdiagnosed but would rather it were than see seriously depressed people left out in the cold. He points out that there is evidence to suggest that the number of suicides has declined as more cases of depression have been diagnosed. It's important to take borderline diagnoses of depression seriously, he says, because "most of the suicides do not occur in the most severely depressed".

Wakefield, however is uneasy about prescribing pills where there is no certainty that they are needed. After all, he points out, antidepressants have side effects, some of them serious.

The need for sad

So where does this leave the notion of human sadness? Should we accept that major life events may make us so sad that we are temporarily disabled? Or should we run to the doctor in the hope that pills will speed up our emotional journey back to happiness?

Ken Kendler, a psychiatrist at the Virginia Commonwealth University in Richmond, points out that for some people, sadness is definitely something they are better off without. He recalls a mother in her late 20s who came to him because she had an inoperable defect in her aorta that would rupture at some undeterminable time in the future, killing her instantly. This knowledge had made her depressed – certainly with reasonable cause – but she did not want to live the rest of her days that way, unable to function for her family.

"That seemed to me to be an irreproachable logic on her part," Kendler says. "I started her on antidepressants. She came back much brighter. The idea that I was depriving this woman of the proper grieving experience and preventing her from experiencing deeply the meaning of this rang very hollow in this particular case."

For those of us not faced with such an extreme problem, Terence Ketter, a psychiatrist at Stanford University in California, is more cautious. "The cost of happiness is complacency," he says. Sadness is still something useful: "Discontent can drive change. Certainly, you don't want to stifle or blunt emotion – emotion is information."

Keedwell agrees. "Clearly, if we didn't feel sad when we were unsuccessful at achieving certain goals, we would not stand back from that goal and introspect and perhaps try to change our strategies," he says, echoing Wakefield and the Harvard creativity study.

A pill for every ill

When the first antidepressant came to market in the 1950s, the company that marketed it did not think there were enough depressed people for the drugs to make a profit. By 2000, though, antidepressants were a $7 billion business in the US alone. Outpatient treatment for depression increased threefold between 1987 and 1998.

Many people blame the pharmaceutical industry for huge increases in the number of depression diagnoses, especially in countries like the US where drug companies can advertise their products directly to consumers on television, radio and in magazines. One recent study by Richard Kravitz at the University of California, Davis, aimed to test this idea.

Kravitz sent actors into doctors' offices. Half presented symptoms of depression, half did not. Each actor either asked for the antidepressant Paxil specifically, asked for help from a drug without specifying which one they wanted, or made no request. Those who asked for a drug were more likely to get one than those who did not request medication, whether or not they had symptoms of depression (*The Journal of the American Medical Association*, vol 293, p 1995).

Gordon Parker of the Black Dog Institute in Sydney, Australia, also points out that the drug industry has benefited from the somewhat broad definition of depression. "Having a lack of precision has made it absolutely appropriate for the pharmaceutical industry to say, 'We're just treating this broad, generic condition,'" he says.

Others are not so convinced that patients are being led towards a decision. "One view is that this is being marketed by the doctors and the pharmaceutical industry. I think that misses the argument that people themselves are much more interested in having a better life," says Ian Hickie of the Brain and Mind Research Institute at the University of Sydney. "People are always looking to enhance themselves. I don't think clinical depression is a lifestyle issue. It's just like surgery being a serious thing, but that doesn't stop the cosmetic surgery industry."

Sad or depressed?

If you have experienced five of the symptoms below for two weeks or more, including at least one of the first two, you meet the diagnostic criteria for major depressive disorder.

- Depressed mood
- Reduced interest or enjoyment in normal activities
- Loss or gain of weight or appetite
- Insomnia or excessive sleep
- Fatigue or loss of energy
- Feelings of worthlessness, or excessive or inappropriate guilt
- Indecisiveness or reduced ability to concentrate
- Agitated motion like pacing or hand-wringing, or physical slowing down
- Thoughts of death or suicide

This definition, introduced in the third edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-III*) in 1980, changed the definition of depression from something that depended on the context of an individual's life circumstances to a more objective list of symptoms.

There is one notable caveat. According to the *DSM* criteria, if you have these symptoms after the death of a loved one you are not considered to be depressed, but suffering a normal reaction to bereavement.

Some, however, say that bereavement isn't the only type of grief that should be left out of a diagnosis of depression. Jerome Wakefield of New York University is one of them. He says that other losses, like divorce, illness or loss of a job, should also exempt people from a diagnosis of depression because these unhappy but commonplace events can trigger similar symptoms. "It does make one worry that any negative emotion [except the grief of bereavement] that disrupts your ability to function in a happy manner could be classified as a disorder," he says.

In a study published in 2007, Wakefield's team reported on more than a thousand people who met the criteria for major depressive disorder, some of whose episodes were triggered by "standard" bereavement and others whose depression was triggered by another loss. They found that the depression they suffered was very similar. "That suggested that about 25 per cent of people who would be diagnosed in the community as being depressed are probably actually suffering from normal reactions," Wakefield says. Moreover, the symptoms of those who were grieving for reasons other than bereavement were indistinguishable from those of the bereaved (*Archives of General Psychiatry*, vol 64, p 433).

Wakefield says this means that other forms of normal sadness should be exempted from the *DSM* criteria. Other researchers, though, feel the opposite is true: that far from being excluded, anything that creates depressive symptoms – grief included – should be diagnosed as clinical depression and treated accordingly.

Ken Kendler at the Virginia Commonwealth University in Richmond, for example, carried out a similar study to Wakefield's but drew the opposite conclusion. He compared individuals with bereavement-related depression with those depressed because of other stressful events. He found that there were few differences in symptoms between the groups. "Bereavement-related depression often is recurrent, genetically influenced, impairing, and treatment-responsive," he writes – not just something that everyone goes through (*The American Journal of Psychiatry*, vol 165, p 1449).

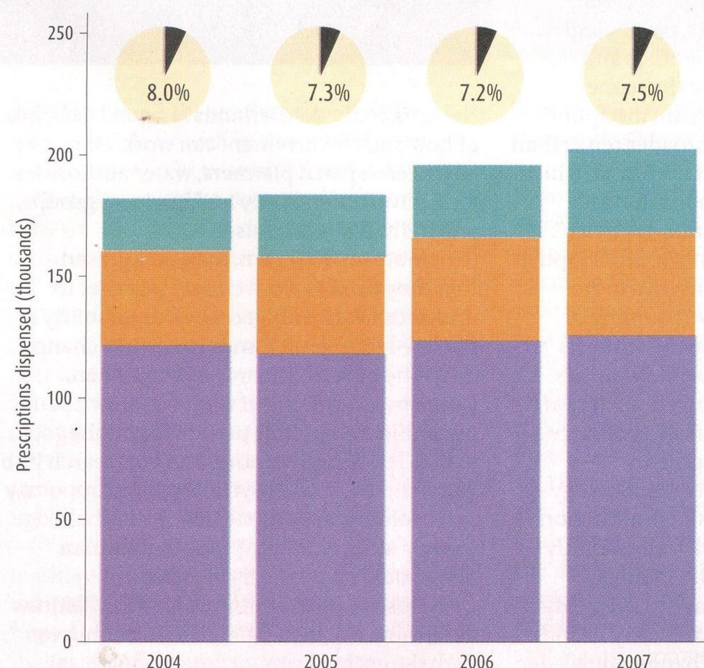
With the next edition of *DSM* due in 2012, the debate is likely to hot up over the next couple of years. For some, however, the problem isn't just about exemptions, it is also about setting the bar too low. For Gordon Parker, a psychiatrist and executive director of the Black Dog Institute in Sydney, Australia, making a diagnosis of depression easier to reach isn't helpful.

"[It] has taken psychiatry into the dark ages," he says. In his view, there's no use in having a definition of depression that is broad and devoid of context. "Say you go along to your general practitioner and he says, 'I know what you've got. You've got major breathlessness.' You're not going to be very impressed. You want to know whether you've got pneumonia or asthma, or a pulmonary embolus, because you then know that the treatment will be rational. If you go with a generic diagnosis, how can you possibly work out what is the key, underlying pathology?"

MEDICATING MISERY

Dispensed antidepressant prescriptions in the US

- Serotonin-norepinephrine reuptake inhibitor (SNRI)
- Norepinephrine and dopamine reuptake inhibitors (NDRIs)
- Selective serotonin reuptake inhibitor (SSRI)
- Percentage of American adults who have suffered one major depressive episode



"Being enthusiastic and jubilant we would probably go blindly on."

So is there some middle ground? Both sides agree that there are ways to lift the gloom without pills. "An alternative would be thinking about what is making you unhappy," says Wakefield. "Another possibility is watchful waiting. A more nuanced view of the situation will help people think about their options better."

Diener also suggests we stop obsessing about being happy all the time (see "A pill for every ill", page 38). "One of the things we want to do is disabuse people of the notion that they're not happy enough," he says. He cites a study that used emotion-recognition software to work out the Mona Lisa's inner feelings (*New Scientist*, 17 December 2005, p 25). It concluded that she is 83 per cent happy. The rest is a mix of negative emotions like fear and anger. That, it seems, is just about right. ●

Jessica Marshall is a freelance science writer based in St Paul, Minnesota

Read previous issues of *New Scientist* at www.newscientist.com/issues/current