

Depression and Resilience

Depression is a frequent companion of both neurological disease and caregiving, but there are ways to bounce back from life's difficulties.

BY ANDREA
COOPER



Deena Pierott has lived with her two sons and her mother, Jeanine Russell, for years. That day-to-day familiarity made it easy for Pierott to discount the little changes in her mom's behavior. That is, until Russell confidently told a doctor in 2007 that the date was 1962.

Russell's dementia diagnosis was disheartening in itself. But within weeks Pierott, a single mother in Vancouver, WA, faced another blow: She learned her government job would be eliminated, leaving her family without an income. Once word got around of her impending layoff, some colleagues treated her as if she had an illness they could catch. "It was a very dehumanizing experience," Pierott recalls.

Her success establishing a recruiting business helped her push away the sadness for a while. But over time Pierott withdrew from friends, gained weight, and didn't want to dress up anymore. The optimist who ends her phone conversations with, "Have an amazing week!" slipped into depression. It's been just in the last eight months that she has hit upon a combination of techniques to lift her mood.

If you care for someone with a neurological ailment, you may have already discovered that depression is an occupational hazard of caregiving. If you have a neurological disease, depression is frequently a companion condition. It can slide into your psyche with your primary illness like a copperhead quietly waiting to strike.

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Signs of Depression

- ▶ Inability to experience pleasure
- ▶ Lack of interest in activities you used to enjoy
 - ▶ Insomnia or sleeping too much
 - ▶ Loss of appetite or significant weight gain
 - ▶ Lack of energy
 - ▶ Very low self-worth
- ▶ Inability to concentrate
 - ▶ Suicidal thoughts

(Source: American Psychological Association)

WHO GETS DEPRESSED?

Depression can feel like poison, but you can escape its fangs. According to the World Health Organization, depression is a common mental disorder whose symptoms include depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration. (See, "Signs of Depression.") Without treatment, it can be a chronic condition that comes and goes—or lasts and lasts. Yet, depression can be very successfully treated with psychotherapy, medication, or both. In addition, there are changes you can initiate to become more resilient in the face of life's challenges. Resilience is the belief that you can persevere in spite of whatever is happening.

Treating depression can leave patients better able to manage their medical conditions and caregivers more capable of helping their loved ones. "If they are treated vigorously enough and long enough, the vast majority of people will get better, and most of those, fully better," says psychiatrist Peter Kramer, M.D., whose books *Listening to Prozac* (Penguin, 1997) and *Against Depression* (Viking, 2005) helped frame the way we view the disorder.

Some 18.8 million American adults suffer from depression during any 12-month period, estimates the National Institute of Mental Health. Twice as many women experience it as men.

Neurological patients are at particular risk. For example, up to 60 percent of U.S. patients with Parkinson's disease suffer from depression, according to the Parkinson's Disease Foundation, and up to 60 percent of U.S. patients with epilepsy suffer from depression, according to the Epilepsy Foundation. It occurs in high rates among people with traumatic brain injury, notes William Perry, Ph.D., past president of the National Academy of Neuropsychology. Depression is also a frequent companion of migraines and stroke.

"There are people who have never been depressed in their lives who become depressed after they have had strokes," Dr. Kramer says.

Many neurological disorders are chronic and long-term, which means that a major life stressor can last for years or decades. Even the cures can hurt: Some medications used to treat neurological disease, such as interferon for multiple sclerosis, can cause depression.

The stress of caring for someone with a neurological disease poses its own risks. In *Caregiving in the United States 2009*, a study of nearly 1,500 caregivers, 17 percent of respondents described their physical and mental health as fair or poor, compared to 13 percent of the general adult population. The study, conducted for the National Alliance for Caregiving in collaboration with AARP, found that the longer a caregiver provided care, the more likely she was to report fair or poor health. (And it was more likely to be a she—the typical caregiver is a 49-year-old woman.) Seventeen

percent said caregiving has made their health worse.

Caregiving can lead to isolation, a risk factor for depression. Half of caregivers polled in the *Caregiving 2009* report said their caregiving takes time away from friends and other family members, and those who gave up time with others were far more likely to feel high emotional stress. Yet we all know people who deal with serious responsibilities and traumas without permanently losing their sunny dispositions and joy. What makes one person vulnerable to depression and another relatively carefree?

NATURE AND NURTURE

Depression appears to run in some families, perhaps because of shared genes, or a shared environment, or both. The disorder is tied to levels of an array of mood-influencing neurotransmitters, including acetylcholine, gamma-aminobutyric acid, dopamine, norepinephrine, and serotonin. The exact cause of depression isn't clear, but it's hard to underestimate the importance of these chemical messengers in the brain's operations. Serotonin, for instance, "reaches most cells in the brain," says Beverly Hills cognitive behavioral therapist Leslie Seppinni, Psy.D. It has a "significant and direct link" not only to hunger and appetite, sexual desire, memory and ability to learn, but also to depression, anxiety, and overall mood.

A widely publicized 2003 study in the journal *Science* identified the 5-HTT gene, which transports serotonin, as key to resilience. That study found subjects who had one variation of the gene were able to bounce back quickly from serious setbacks; those with another variant lingered in depression. The study generated much excitement, but in summer 2009, a new report in *The Journal of the American Medical Association* said the results could not be reliably duplicated. The report assessed 14 follow-up studies and didn't find evidence of a tie between 5-HTT and the risk of depressed mood. Ultimately, the genetic risk factors for depression may include multiple genes that help shape personality, Dr. Kramer says.

Researchers are also probing the role of hormones in depression. The stress hormone cortisol is present in higher amounts in approximately 50 percent of people with clinical depression, says Linda Copel, Ph.D., a nursing professor at Villanova University in Villanova, PA, and practicing psychotherapist who works with people with chronic illness. In typical adults, cortisol levels range from roughly from 4 to 22 micrograms per deciliter of blood. The levels are highest around 8 in the morn-



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— PSYCHOLOGIST ELIZABETH LOMBARDO, PH.D.

ing. By 4 p.m., these levels in average adults will drop, to 3 to 14 micrograms. But in people who are clinically depressed, the levels remain elevated throughout the day.

The actual structure of the brain can't be ignored, either: The right cortex, or outer surface of the brain, is significantly thinner in families with a history of depression, according to a 2009 paper in the *Proceedings of the National Academy of Sciences*. People with long-term depression also seem to have smaller hippocampuses, an area associated with memory.

However, what happens to a person, especially early in life, could matter as much as the physical qualities of the brain. Abuse or neglect in childhood, for example, is a predisposing factor for depression. Such experiences can even change brain chemistry and brain functioning. Thankfully, those changes aren't permanent. “Absolutely not,” says Dr. Perry, associate director of neuropsychiatry at University of California-San Diego Medical Center. “Even in significant cases where people have depression independent of neurological disease, treatments are quite effective” in restoring the brain chemistry that allows you to see light, not just shadow.

TREATMENTS FOR DEPRESSION

Medications can be a powerful resource for certain patients with severe depression, changing your outlook so that psy-

chotherapy and self-care strategies such as exercise and a healthy diet can be more beneficial. The medications most commonly prescribed are reuptake inhibitors for serotonin, norepinephrine, dopamine, or a combination. They boost the level of neurotransmitters in the brain by blocking the transmitters' reabsorption into cells, though exactly what they do to halt depression is not known. One theory holds that antidepressants allow the brain to make new cells and connections between cells in the hippocampus and prefrontal cortex. “If the prevailing theory of resilience is right, you are really getting repair, recovery, or alternate pathways growing in the brain when you treat depression vigorously or successfully,” Dr. Kramer says.

Pharmacological interventions don't work for everyone, and it's unclear how effective they are for mild to moderate depression. A 2010 report in *The Journal of the American Medical Association* found there is “little evidence” they work better than a placebo for that population.

Since childhood, Cyndi Pauwels, 51, has suffered from depression, later compounded by migraines. The married mother of two in Spring Valley, OH, says, “the side effects have always been worse than the temporary relief any of the pills offered.” She believes she missed significant parts of her children's lives because prescription drugs left her emotionally detached and uninvolved.

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So six years ago, she weaned herself off medication—a step that should only be taken under a doctor’s supervision. She controls depression now with meditation and exercise, including walking outside a couple of miles a day with her husband. Pauwels also takes breaks from the 24-hour news cycle. “I’m not a hermit, but I control what I allow into my mind,” she says.

Strong studies show meditation and exercise can both be effective against depression, says Wexford, PA, psychologist Elizabeth Lombardo, Ph.D. Meditation helps banish those ruminating thoughts about the difficulties of life. It “causes us to focus on something else—breathing and being mindful in the moment,” Lombardo says. Mindfulness-based cognitive therapy, which incorporates meditation, can help prevent relapse of depression, according to a 2008 study in the *Journal of Consulting and Clinical Psychology*.

In addition, “The hormones secreted during exercise combat depression and elevate mood,” Dr. Lombardo says. Though going out for a run may sound like last thing you’d ever feel like doing when you’re unhappy, those bursts of physical activity are a productive way to distract yourself and do something positive for body and mind. There’s science to back up your efforts, too: A 2005 analysis in the *American Journal of Preventive Medicine* found that 30-minute aerobic exercise sessions three to five times a week reduced symptoms of mild to moderate depression.

Light therapy has been shown beneficial for people with seasonal affective disorder, which is gloom that strikes primarily in winter. A box emits bright light to trigger changes in the brain that can diminish symptoms of depression.

Sleep deprivation therapy, as strange as that sounds, can also interrupt the cycle of depression. It’s believed “to change the individual’s circadian rhythms, which impact one’s neurochemistry,” Dr. Perry says. Such therapy needs to be supervised by a physician well versed in the treatment—just staying up all night watching movies won’t do it.

Electroconvulsive therapy (ECT) remains a controversial option for people who are severely depressed or suicidal. During ECT, an electric current is sent through the brain to stimulate a brief seizure and alter the brain’s chemistry. (The famous surgeon and writer Sherwin Nuland, M.D., has spoken about his experience with ECT; go to the Web site [Ted.com](http://www.ted.com) and search for “Sherwin Nuland” and “electroconvulsive therapy.”)

Deep brain stimulation (DBS) is an experimental surgery for depression that’s been compared to an emotional pacemaker. The surgery implants electrodes in the brain to carry electrical pulses and reset the brain’s circuits. It’s an established treat-

ment for Parkinson’s but considered a last-resort alternative for depression because of the risks and potential side effects.

For many people, psychotherapy is the foundation of treatment. Multiple studies and meta-analyses (a method of analyzing results from numerous studies) have concluded that cognitive therapy in particular can be valuable for depression. Cognitive therapy focuses on what you think and how it makes you feel. It’s designed to help you recognize the automatic thoughts that come to mind when you feel despondent, learn how to make different explanations and assumptions about yourself, and develop the ability to stop dwelling on thoughts that depress you.

CULTIVATING RESILIENCE

Cognitive therapy requires a skillful therapist for lasting results. But there are also steps you can take independently to become more resilient in the face of life’s bumps, bruises, and crises. Resilience “includes realistic optimism, hardiness, determination, and self-confidence,” says Dr. Lombardo.

Though experts differ on whether resilience can be developed as an adult, many believe it can. Probably the best known is psychologist Martin Seligman, Ph.D., past president of the American Psychological Association and director of the Positive Psychology Center at the University of Pennsylvania. He believes the way we talk to ourselves—specifically, the way we explain events and our part in the good or bad things that happen to us, called “explanatory style”—makes the difference between being happy and optimistic or not.

“Explanatory style has a sweeping effect on the lives of adults,” he writes in his landmark book *Learned Optimism* (Free Press, 1998). “It can produce depression in response to everyday setbacks, or produce resilience even in the face of tragedy. It can numb a person to the pleasures of life, or allow him to live fully. It can prevent him from achieving his goals, or help him exceed them.”

Depression can leave you feeling as if you’re in a car crash that never ends. But that screech of metal, that panic and dread, doesn’t have to last, given all the successful treatments available. Deena Pierott, who cares for two sons, one mother, two businesses, and has even served on a state advisory commission in her free time, is a testament to that. For her, self-care worked. She confided in friends and sought help from her pastor. But she says she would have used medication if she felt she needed it—whatever it took to break free. “I knew I had to be strong enough to change the situation,” she says. “I’m the nucleus in this household for my sons and mother. I had to take care of me.”

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How to Become Resilient

Here's a look at techniques from Dr. Seligman and others for boosting resilience and managing depression.

CHANGE YOUR EXPLANATORY STYLE. The role of explanatory style has been extensively examined in more than 30 studies involving adults. "What's significant is how we interpret negative events," says Manhattan psychologist and Positive Psychology proponent Joseph Ciona, PsyD. You may have learned a pessimistic, hopeless style as a child or teen, but it doesn't have to stay that way, Dr. Ciona believes. Three characteristics make the difference between a pessimistic style and one that could that make you happier and more resilient, he says:

► **Permanence.** People prone to pessimism believe the reasons for bad events are permanent and never ending, likely due to some flaw in themselves. They think, "I'm a failure" or "Diets don't work." Optimists look at the reasons as temporary. They think, "I'm exhausted today so I'm not doing my best work," or "Diets don't succeed when you're so busy you have to eat out four times a week."

► **Pervasiveness.** Do you tell yourself, in one variation or another, that the world is always tough on you? That's a pervasive explanation. People with a pessimistic style tend to make universal explanations and generalize to many areas of their lives, Dr. Ciona says. Optimists make specific explanations and don't generalize. It's the difference between thinking, "I'm always yelling at my kids. I'm a bad mother and I'll never improve," versus "I was really snapping at the kids today. I'm under a lot of stress because of Mom, and I think I need to ask for help this weekend."

► **Personalization.** Pessimists blame themselves even when that blame isn't warranted. Optimists blame other people or circumstances. They're also more likely to believe they are the reason for good events. It's no surprise they tend to have much higher self-esteem than people who personalize everything in a negative light.

Changing your explanatory style is not the same as becoming unrealistically sweet or flat-out delusional in your outlook. It's actually a way to become more realistic about what's happening in your life. "When something bad happens, notice your thoughts and feelings. What are the underlying beliefs and assumptions? Is there evidence to support them? Are there other plausible explanations?" Dr. Ciona says. "Like anything, this requires practice and repetition. The first key step is awareness."

CREATE YOUR OWN LUCK BY USING YOUR STRENGTHS. It's easier to be resilient when your luck is good, so why not create your own luck? For Dr. Kramer, that means playing to your strengths. We often hear we should have balance in our lives

and not be workaholics, for example, but "for some people, being a workaholic is a very successful strategy," Dr. Kramer says. Others aren't naturally high-powered executives but are social geniuses. Their charm and honesty win them good jobs, admiration, and love. There's more than one path to a rich life, and you may find yours more easily by playing to your strengths.

HONE YOUR SKILLS AT SOLVING PROBLEMS AND RECOGNIZE WHEN YOU'RE SUCCESSFUL. Psychologist Andrew Shatte, Ph.D., co-author of *The Resilience Factor: 7 Keys to Finding Your Inner Strength and Overcoming Life's Hurdles* (Broadway, 2002) and a resilience trainer for corporations and the federal government, found in a large-scale study on resilience that while men and women are equally skilled at solving problems, women are less convinced of their skill. Practice breaking down a problem into parts and determine which you can solve. Fix what you can and let the rest go. Give yourself credit when the problem is resolved.

REACH OUT. Spend time, in ways you find meaningful, with people who value and respect you. Consider a support or therapy group if it would help you to talk over problems and joys with people having similar experiences.

PLAN AHEAD. It's easier to deal with obstacles when you've given yourself the support and supplies you need. That could be something big, like keeping an emergency stash in your bank account to help your family deal with unexpected medical bills. But it could also be something small, like knowing the name of a great computer repair guy before your computer goes kaput.

SLEEP, PLAY, EXERCISE. Get help if you have difficulty sleeping. (See, "Learning to Sleep," page 34). Play and do something you enjoy each day. Find support in prayer and your house of worship if you are so inclined. And remember that daily exercise can be extremely helpful in erasing depression. "Vigorous exercise changes brain chemistry just as medication does," says Robert Epstein, Ph.D., a psychology researcher and former editor-in-chief of *Psychology Today* magazine.

PAY ATTENTION TO YOUR DIET. Several studies, including a 2009 clinical trial at Massachusetts General Hospital, have suggested that fish oil containing omega-3 fatty acids eases depression. Try adding more of these polyunsaturated oils to your menus by eating fish several times a week, including salmon, mackerel, or tuna. Nuts are another good source. If you're thinking of taking fish oil as a dietary supplement, talk with your doctor first.