

The “Chemical Imbalance” theory as a cause for anxiety and depressive disorders officially put to rest!

It has long been postulated that anxiety and depressive disorders were caused by a chemical imbalance in the brain. More specifically, the “chemical imbalance” theory presumed that serotonin, a neurotransmitter in the brain, was below normal levels, and therefore caused anxiety and depressive disorders to occur.

For example, Lexapro’s website (Lexapro is a popular antidepressant that is said to be able to restore this chemical imbalance) stated:

“Whatever the circumstances, depression is caused by an imbalance of certain chemicals in the brain. Normally, these “chemical messengers” help nerve cells communicate with one another by sending and receiving messages. They may also influence a person’s mood. In the case of depression, the available supply of the chemical messengers is low, so nerve cells can’t communicate effectively. This often results in symptoms of depression.”

[Taken from Lexapro.com’s website, May 1, 2009]

And Paxil’s website (Paxil is another antidepressant that is said to be able to restore this chemical imbalance) claimed:

“Scientific evidence suggests that depression and certain anxiety disorders may be caused by a chemical imbalance in the brain. Paxil CR helps balance your brain’s chemistry. (See Important Safety Information about Paxil CR.)

Just as a cake recipe requires you to use flour, sugar, and baking powder in the right amounts, your brain needs a fine chemical balance in order to perform at its best.

Normally, a chemical neurotransmitter in your brain, called serotonin, helps send messages from one brain cell to another. This is how the cells in your brain communicate.

Serotonin works to keep the messages moving smoothly. However, if serotonin levels become unbalanced, communication may become disrupted and lead to depression, anxiety, and PMDD.

Paxil CR helps maintain a balance of serotonin levels, which may help cell-to-cell communication return to normal. Paxil CR is with you throughout the day to help you manage and treat your condition.”

[Taken from paxilcr.com’s website, May 1, 2009]

And Zoloft's website (Zoloft is another antidepressant that was said to be able to restore this chemical imbalance) stated:

"Zoloft® (sertraline HCl) is a type of antidepressant known as a selective serotonin reuptake inhibitor or SSRI.

Nerve cells in the brain and the rest of the nervous system use chemical messengers. These messengers help cells send messages to each other. One of these messengers is called serotonin.

Studies show that serotonin plays a vital role in how our body works. It controls sleep, appetite, temperature, and blood vessel tone. It's also in charge of the release of certain hormones and how much pain we feel.

Because it is linked with so many functions in our body, serotonin has an effect on a wide range of conditions such as depression.

This tie between depression and serotonin led scientists to an interesting find. Scientists believe people with depression could have an imbalance of serotonin in their brain.

That means the level of serotonin is "off." So the nerve cells can't communicate, or send messages to each other the right way. This lack of contact between cells might cause depression.

Zoloft helps fix this. Zoloft helps the nerve cells send messages to each other the way they normally should."

[Taken from zoloft.com's website, May 1, 2009]

And Effexor's website (Effexor is another antidepressant that was said to be able to restore this chemical imbalance) stated:

"Effexor XR is believed to treat depression and anxiety symptoms by affecting the levels of two naturally occurring chemicals in the brain — serotonin and norepinephrine. It is believed that correcting an imbalance of these two chemicals may help relieve symptoms. Because Effexor XR affects these two chemicals, it is known as an SNRI, or serotonin-norepinephrine reuptake inhibitor."

[Taken from effexorxr.com.com's website, May 1, 2009]

These are just a few of the many claims about the "chemical imbalance" theory and its link to anxiety and depression.

Based on this theory, clinicians treated anxiety and depressive disorders with medications that were supposed to increase the low levels of serotonin, thereby resolving anxiety and depressive disorders. As this practice gained acceptance, doctors, mental health

professionals, and the general public widely accepted the chemical imbalance theory and its link to anxiety and depressive disorders.

Heavy marketing to medical and mental health professionals, and to the general public reinforced the theory, and therefore popularized treatment using medications specifically targeted at restoring this chemical imbalance. Over time, this theory gained momentum and became an almost accepted fact.

Today, a great many medical and mental health professionals believe in the chemical imbalance theory as being the cause for anxiety and depressive disorders, and therefore, treatment of these conditions almost always includes the use of antidepressant medications (also known as SSRI or SNRI medications).

How prevalent was this approach to anxiety and depression?

Effexor, Lexapro, and Zoloft (popular antidepressants) were in the top 40 best selling medications in the world in 2006, and accounted for a combined total of over 8.5 billion dollars in sales during that year.

As well, two online polls conducted by anxietycentre.com in 2007 found:

- 90.5 percent of respondents said their doctor or mental health care professional wanted to prescribe medication for their anxiety or depressive disorder (or for both)
- 71.5 percent of respondents said their doctor or mental health professional told them that their disorder was caused by a chemical imbalance

But is the “Chemical Imbalance” theory true?

The chemical imbalance theory as a cause for anxiety and depressive disorders is NOT true. In fact, there is NO independent research to support this theory. NONE!

Over the last five years, research has found that there are many problems with the chemical imbalance theory as a cause for anxiety and depressive disorders. Furthermore, independent investigations have found that there never was any “real” evidence to support the chemical imbalance theory, even at the outset.

So if the “chemical imbalance” theory is untrue, how did it become established as an accepted theory?

Marketing.

Without going into great detail about how this transpired, here is a brief overview:

- Pharmaceutical research and so-called “independent studies” supported the notion of a “chemical imbalance,” and that SSRI medications were effective in resolving this imbalance.
- The results of these “studies” were published in respected health journals.
- Health professionals who read these journals formed their opinions based on what they thought was solid research.
- Pharmaceutical companies marketed directly to doctors and mental health care professionals using these studies to substantiate their claims.
- Pharmaceutical companies also aggressively marketed the “chemical imbalance” notion to the general public.
- As a result, the chemical imbalance theory became widely accepted and so did the drugs used to “correct” it. Even today, a great number of doctors and mental health care professionals still use these findings in support of their assertion that anxiety and depressive disorders are caused by a chemical imbalance, and that medication is required for treatment.

Marketing was the primary driver behind the acceptance of the “chemical imbalance” theory.

For example, here is an article that talks about the amount of money pharmaceutical companies spent on marketing:

Drug-research spending second to marketing: study

American drug companies spend almost twice as much on promoting their pills than on researching and developing new ones, finds a new Canadian study.

CTV.ca – January 3, 2008

http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20080103/marketing_drugs_080103/20080103?hub=Canada

Recent research finds that the chemical imbalance theory lacks evidence

While those mental health care professionals (counselors, psychologists, therapists) who worked on the front lines of anxiety and depressive disorder treatment knew for many years that these conditions weren’t caused by a chemical imbalance problem, research to this effect was scant.

But over the last five years, new research is confirming what these professionals have known all along: that there is NO truth to the chemical imbalance theory. As a result of this new research and the professional experiences of those who successfully treat anxiety and depression, many are calling the chemical imbalance theory busted.

Here are some recent headlines to that effect:

Unsubstantiated Chemical Imbalance Theory Of Depression Perpetuated By Media

The theory that depression is caused by a chemical imbalance is often presented in the media as fact even though there is little scientific evidence to support it, according to a new study co-authored by a Florida State University visiting lecturer.

Medical News Today

<http://www.sciencedaily.com/releases/2008/03/080303164507.htm>

Antidepressants little better than placebos

Reuters News Agency and Guardian News Service

LONDON AND WASHINGTON -- Antidepressant medications appear to help only severely depressed people and work no better than placebos in many patients, a startling study indicates. Researchers led by Irving Kirsch of the University of Hull in Britain reviewed a series of studies, both published and unpublished, on four antidepressants, examining the question of whether a person's response to these drugs hinged on how depressed they were before getting treatment.

Reuters – February 2008

<http://in.reuters.com/article/health/idINN2527622020080226>

Ads for SSRI antidepressants are misleading, say researchers

Consumer ads for a class of antidepressants called SSRIs often claim that depression is due to a chemical imbalance in the brain, and that SSRIs correct this imbalance, but these claims are not supported by scientific evidence, say researchers in PLoS Medicine.

Medical News Today – November 12, 2005

<http://www.medicalnewstoday.com/articles/33290.php>

What we were initially led to believe isn't completely accurate

In addition to recent research, independent investigations have found that many of the early studies that supported the chemical imbalance theory were actually funded by the pharmaceutical manufacturers, and in some cases, the information was “selectively reported” so that the chemical imbalance theory looked plausible. So not only was the chemical imbalance theory incorrect, but research results were skewed causing doctors, mental health care professionals, and the general public to be misinformed.

One example of this “enhanced research” is Paxil Study 329.

Claims that paroxetine was “generally well tolerated and effective” arose from selective reporting of the 15% of outcomes that were positive and selective under reporting of the other efficacy and SAE findings.

You can read more about Paxil Study 329 here:

<http://psychcentral.com/blog/archives/2008/04/30/more-on-infamous-paxil-study-329/>

And here:

Paxil, Lies, and the Lying Researchers Who Tell Them

<http://clinpsyc.blogspot.com/2008/04/paxil-lies-and-lying-researchers-who.html>

More about the misrepresentation of results:

'Scientific misconduct' pervasive in drug industry: study

Earlier this year, a landmark study found that the effectiveness of the top-selling antidepressant drugs had been exaggerated by the selective publication of favourable test results. In other words, good news about the drugs was made public but bad news wasn't. As a result, doctors and patients are left with a distorted picture of how well these drugs actually work.

Globe and Mail – October 17, 2008 (article not available to the general public)

Effectiveness of antidepressants exaggerated

A new study finds antidepressants may be less effective than doctors have been led to believe. That's because it appears that studies that have found the drugs do little to help with depression are not being published.

And if studies that have found less-than-positive results have been published, they have been written as if they were positive.

The finding comes from a new analysis in the New England Journal of Medicine.

CTV.ca – January 17, 2008

http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20080117/antidepressants_080117/20080117/

Antidepressants don't work as well as reported, study says

New England Journal of Medicine reports that 88 per cent of clinical trials that showed the drugs didn't work either weren't published in medical journals or were presented as positive findings.

Globe and Mail – January 2008

<http://www.theglobeandmail.com/servlet/story/RTGAM.20080116.wpharma1701/BNStory/specialScienceandHealth/home>

"In January, a study in the prestigious New England Journal of Medicine provided the first hard evidence of a practice known as selective reporting, in which the good news about a drug is made public and the bad news isn't...."

"Dr. Turner and his team compared these formerly confidential antidepressant studies with what was eventually published in medical journals, which serve as a primary source of drug information for doctors. Their findings revealed that only the bullish antidepressant studies tended to see the light of day. The negative studies

were essentially buried. As a result of this selective publication of favourable results, doctors and patients were left with a distorted picture of how well these drugs work. In other words, doctors could be prescribing drugs that aren't as effective as they thought or have under-reported side effects."

Globe and Mail – January 2008.

As it turns out, "ghostwriters" wrote many of the articles in support of the chemical imbalance theory. **Ghostwriting** is the practice of pharmaceutical companies writing review articles endorsing new medications then compensating (financial or otherwise) prominent doctors and scientists so that they would put their names to them. Many of these articles are then submitted to medical journals leaving readers to believe that the doctor or scientist was the author.

For more information about ghostwriting:

Ghostwriting: the basics

<http://www.cbc.ca/consumers/market/files/health/ghostwriting/faq.html>

Researcher Sheds Light On Ghostwriting In Medical Journals

<http://www.sciencedaily.com/releases/2005/04/050414201152.htm>

What Should Be Done To Tackle Ghostwriting in the Medical Literature?

<http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.1000023>

Medical journal editors condemn ghostwriting

<http://news.bio-medicine.org/medicine-news-3/Medical-journal-editors-condemn-ghostwriting-10409-1/>

The serotonin chemical imbalance theory is false.

Others have come forward to refute the notion of the chemical imbalance theory. For example:

"In the 1970s, my colleagues and I did a variety of experiments to test the theory that depression results from a serotonin deficiency in the brain. Our results simply were not consistent with this theory."

"I also reviewed the entire world literature on brain serotonin but couldn't find one shred of compelling evidence that a deficiency of serotonin, or any chemical imbalance in the brain, cause depression, anxiety, or any other psychiatric disorder. To this day, I am still not aware of any studies that have ever validated the chemical imbalance theory."

"Many neuroscientists no longer considered a chemical imbalance theory of depression and anxiety to be valid."

"This theory is fueled more by drug company marketing than by solid scientific proof. Billions of dollars of annual profits from the sale of antidepressants and anti-anxiety medications are at stake, so drug companies spend vast amounts of money promoting the chemical imbalance theory. They also subsidize a large portion of the budget of the American psychiatric Association and underwrite an enormous amount of research and education at medical schools."

"Academic research should be all about getting to the truth. Drug company research is all about selling new products."

"But if I tell you that your depression or panic attacks result from a chemical imbalance in your brain, then I'm telling you something that can't be proven, because there is no test for a chemical imbalance in the human brain."

[Excerpts from "When Panic Attacks" by David D. Burns]
David D. Burns, M.D., author of "When Panic Attacks" and "Feeling Good"

"Low serotonin levels are no more the cause of depression than low aspirin levels are the cause of headaches."

Johnathan Leo of Lake Erie College of Osteopathic Medicine in Florida

Wayne Goodman, US Food and Drug Administration chairperson admits that the chemical imbalance story is a "useful metaphor" but claims that he would never tell his own patients that they were suffering from a chemical imbalance. "I can't get myself to say that," he stated.

"The Irish Medicines Board, an equivalent body to the FDA in Ireland, has banned the drug company GlaxoSmithKline from making claims that depression is caused by a chemical imbalance. Such information is no longer permitted to be printed in patient information brochures.

"This is a great breakthrough for depression sufferers around the world. The myth of chemical imbalance effectively renders the sufferer a victim of circumstances seemingly beyond their control. Systematic deletion of this myth from popular folklore will hopefully encourage sufferers of depression to look for more effective ways of dealing with and eliminating their depression."

Beth McHugh, counselor and published author

On behalf of MindFreedom, US Senator Ron Wyden contacted the FDA for an explanation about why they approve such false advertising. In their response -- which took over one year -- the FDA could cite no scientific literature or studies.

The chemical imbalance theory, popularized by marketing, is *"no more than psychiatric wishful thinking,"* says Bruce Wiseman, author and former educator. *"It has been thoroughly discredited by researchers, doctors and scientists. The only reason it exists is that it makes it easier for psychiatrists to drug vulnerable and often desperate individuals. It is driven by more than \$23 billion in drug sales each year."*

"The pharmaceutical industry has managed to convey a misleading picture," Joanna Moncrieff, MD, a senior lecturer in psychiatry at University College London, U.K., told Medscape. *"I speak to quite a few journalists, and they are shocked to hear that the link between serotonin and depression is very tenuous and the research conflicting and not convincing. The psychiatric profession and academic researchers are probably also partly to blame for glossing over the weakness of the research."*

"Some 19 million people in the U.S. suffer from depression in any given year. For many, SSRIs help little, if at all. To do better, we have to get the science right."
Sharon Begley, Wall Street Journal

"Not a single peer-reviewed article ... support[s] claims of serotonin deficiency in any mental disorder," scientists write in the December issue of the journal PLoS Medicine.

"There's no biological imbalance. When people come to me and they say, 'I have a biological imbalance,' I say, 'Show me your lab tests.' There are no lab tests. So what's the biochemical imbalance?"

"There is no such thing as a chemical imbalance, and any psychiatrist that you talk to, if you ask them this question, they'll all admit it in private but they won't admit it in public. It's a scandal."

"Remember that no biochemical, neurological, or genetic markers have been found for attention deficit disorder, oppositional defiant disorder, depression, schizophrenia, anxiety, compulsive alcohol and drug abuse, overeating, gambling, or any other so-called mental illness, disease, or disorder."

Bruce Levine, Ph.D., psychologist

The cornerstone of psychiatry's disease model today is the theory that a brain-based, chemical imbalance causes mental illness. However, Dr. Mark Graff, Chair of Public Affairs of the American Psychiatric Association said that this theory was "*probably drug industry derived.*" His cohort, Dr. Steven Sharfstein, APA president, was forced under media pressure to admit that there is "*no clean cut lab test*" to determine a chemical imbalance in the brain.

"There are no tests available for assessing the chemical status of a living person's brain."
Elliot Valenstein, Ph.D.

"Patients [have] been diagnosed with 'chemical imbalances' despite the fact that no test exists to support such a claim, and...there is no real conception of what a correct chemical balance would look like."

David Kaiser, psychiatrist

"Biopsychiatrists have created the myth that psychiatric 'wonder' drugs correct chemical imbalances. Yet there is no basis for this model because no chemical imbalance has ever been proven to be the basis of a mental illness."

Ty C. Colbert, clinical psychologist

"Chemical imbalance is a term that's used as a marketing ploy as opposed to anything that there is scientific evidence to support."

John Sommers-Flanagan, Professor of Counselor Ed., University of Montana

"Nobody has yet measured, demonstrated, or created a test to show that somebody has a chemical imbalance in their brain. Period!"

Dr. Thomas Szasz, psychiatrist, professor, and author

"The whole myth of a chemical imbalance was created to sell drugs."
Dr. Rima Laibow, psychiatrist

"The desperate thing about it is that it's all dressed up in the name of science. It's not science at all. It is pure marketing. But they get away with it because it's called science."
Bryan Hubbard, author and publisher

"There's really no test, no x-ray, no chemistry that shows you have this condition. It's really just the opinion of someone who was probably taking money from pharmaceutical companies to prescribe drugs to people."
Mike Adams, Consumer Health Advocate

"There's no blood test. There's no lab test. There's no x-ray. These are just classes of behaviors that a group of psychiatrists have voted that it's a disease."
Dr. Julian Whitaker, physician

"In terms of medication, the evidence that's claimed is medications are highly effective and not very toxic. But actually, in fact, the data in psychiatry are very clear that that's not true. What is true is that the medications are barely, if at all, more effective than placebo."
Dr. Colin Ross, psychiatrist

"You are selling drugs to people under false premises under a disease that's been invented. So how do you measure efficacy among a disease that doesn't even exist."
Shane Ellison, former drug research chemist, Eli Lilly

"For mental/psychiatric disorders in general, including depression, anxiety, schizophrenia, and ADHD, there are no confirmatory gross, microscopic or chemical abnormalities that have been validated for objective physical diagnosis."
Dr. Supriya Sharma, MD, a director general of Health Canada (November 10, 2008)

"I consulted with the FDA new drug review division responsible for approving psychiatric drug products and they concurred with the response you [Dr. Baughman] enclosed from Health Canada.

"Psychiatric disorders (as Health Canada refers) are diagnosed based on a patient's presentation of symptoms that the larger psychiatric community has come to accept as real and responsive to treatment."

Donald Dobbs, Consumer Safety Officer, Division of Drug Information, Center for Drug Evaluation and Research (FDA), in an email to Dr. Baughman in reference to Dr. Sharma's comments, March 12, 2009.

These are just a few of the many comments that came forward about the chemical imbalance myth, or as some people call it, the chemical imbalance fraud.

PROOF/EVIDENCE is the final arbiter in the chemical imbalance theory. If you are told by a doctor or mental health care professional that your anxiety or depressive disorder is caused by a chemical imbalance in the brain, ask to see your test results that show the specific chemical imbalance, and then to show you what degree your serotonin is out of balance. This will be a hard task, since there is no test to determine a healthy level of serotonin in a living brain. None!

There is NO truth to the serotonin chemical imbalance theory. This theory and any reference to it need to be immediately discarded.

The truth is causing change within the medical community

In response to the uproar about the realities of big pharma's financial influence in the medical community, many are reviewing their policies to ensure transparency. For example:

Catherine DeAngelis, editor of the Journal of the American Medical Association, said, *"The influence that the pharmaceutical companies, the for-profits, are having on every aspect of medicine ... is so blatant now you'd have to be deaf, blind and dumb not to see it," adding, "We have just allowed them to take over, and it's our fault, the whole medical community."*

For more information:

Don't MRI or fMRI technologies show this imbalance?

In defense of the chemical imbalance theory, some have said that MRI (Magnetic Resonance Imaging) and fMRI (functional Magnetic Resonance Imaging) technologies show this chemical imbalance. This, however, is also incorrect.

MRI and fMRI scans can confirm electrical activity, blood flow, and oxygen utilization in the brain. They can't, by themselves, determine what is causal and what is effect. Those conclusions require interpretation. While these technologies can see patterns, they DO NOT test for neurotransmitter levels.

As Dr. Burns states, *"If you're feeling sad, your brain may show one pattern; if you're feeling happy or excited, it may show another."*

Yes, MRI and fMRI technologies can be helpful in the diagnostic process for some medical conditions, but they CANNOT determine why anxiety and depressive disorders occur. It's not within their capability.

What about those who claim anxiety and depressive disorders are caused by a genetic predisposition?

Yes, there are some who believe anxiety and depression are caused by a genetic link. But they arrived at this conclusion based on circumstantial evidence – that they seem to run in families – but not fact. This was an observational conclusion, not a scientifically based conclusion.

But again, a genetic cause for anxiety and depression is untrue. While the science of genetics has come along way, there is still a great distance to go.

For example, recent research is finding that our behavior (how we think and act) has a profound impact on how our genes are expressed (how genes are turned on, off, and dimmed). So just because we have a certain genetic structure doesn't mean our destiny is set. As John Krystal, M.D., editor of Biological Psychiatry stated, *"genetics is not destiny."*

Furthermore, recent studies also have found that our environment and behaviors play a major role in the development of health conditions, not genes. This has been our experience with anxiety and depression, as well. Those who come from challenging backgrounds often struggle with anxiety or depression, or both. Those who come from healthy backgrounds, however, generally don't struggle with these conditions.

Anxiety and depression often run in families because of handed-down behavior, not because of genes.

This is also the reason that certain family members may develop anxiety or depression

disorders, while others don't. Some family members may have learned healthy coping skills while others haven't. Again, the reason for this difference is behavioral, not genetic.

If the chemical imbalance theory is false, then why do antidepressants work for some people?

Recent independent studies have found that antidepressant medications provide little benefit over placebo. For example, one study found that an antidepressant medication produced only slightly better results than placebo. But another study found that placebo outperformed the antidepressant medication by a significant margin of approximately 30%.

It is true that a small percentage of people (approximately 25 percent) experience benefits from antidepressant medications. But of that group, many still experience symptoms AND experience adverse side effects from the medication, so the benefit is negligible at best—and this doesn't include other negative effects, such as an increased incidence of suicidal thoughts and physical and psychological dependency, to name a few.

Currently, the answer to why some people experience benefits from antidepressants is unknown, but two theories are gaining prominence. One theory suggests that the benefit is attributable to the placebo effect. Since anxiety and depressive disorders occur because of the way we behave (think and act), if we think we're getting help, we'll naturally feel better.

And more recently, another theory suggests that antidepressants cause an abnormal brain state. It's thought that this abnormal state relieves symptoms as a consequence.

"Antidepressants are assumed to work on the specific neurobiology of depressive disorders according to a "disease-centred" model of drug action. However, little evidence supports this idea. An alternative, "drug-centred," model suggests that psychotropic drugs create abnormal states that may coincidentally relieve symptoms. Drug-induced effects of antidepressants vary widely according to their chemical class—from sedation and cognitive impairment to mild stimulation and occasionally frank agitation. Results of clinical trials may be explained by drug-induced effects and placebo amplification. No evidence shows that antidepressants or any other drugs produce long-term elevation of mood or other effects that are particularly useful in treating depression.

"Conclusion

Many patients are led to believe, by their physicians and by advertising, that antidepressant drugs will act on the biological cause of their depressed state by rectifying a "chemical imbalance" [56]. On the contrary, our analysis indicates that there are no specific antidepressant drugs, that most of the short-term effects of antidepressants are shared by many other drugs, and that long-term drug treatment with antidepressants or any other drugs has not been shown to lead to long-term elevation of mood. We suggest that the term "antidepressant" should be

abandoned. We have proposed an alternative drug-centred model of drug action that is consistent with a demedicalised approach to depression."

Quoted from the article, "Do Antidepressants Cure or Create Abnormal Brain States?" written by Joanna Moncrieff and David Cohen

It should be noted that good self-help information, stress reduction, regular mild exercise, deep relaxation, diaphragmatic breathing, alcohol consumption, tranquilizers, antihistamines, taking a warm bath, going for a walk, enjoying a hobby, talking with family and friends, and working with a counselor or therapist also produce symptom reduction and condition relief. All of these, except alcohol consumption, tranquilizers, and antihistamines, produce no negative side effects and can produce significant symptom reduction and even long-term relief.

While we don't recommend alcohol consumption, regular tranquilizer use, or the use of antihistamines as a way of managing symptoms, we recommend all of the above natural strategies for both short and long term results.

The most effective treatment for anxiety and depressive disorders, however, is the combination of good self-help information and coaching/counseling/therapy by therapists who have personally experienced anxiety and depression, who have successfully overcome them, and who have been medication-free for at least five years if medication was used. Therapists with this background understand these conditions and will be able to help you resolve your condition.

It's also worth noting that the quality of therapist will make a difference in your recovery, since not all therapists are equal. The experience, training, and capability of the therapist often determines the level of success you can expect to achieve.

What if I'm already on medication, should I come off?

No. If you are on medication, there's no urgency to come off. In fact, we don't recommend coming off of medication until you are well equipped with successful recovery skills. Most often, this includes working with a coach/counselor/therapist.

Medication is NOT going to interfere with adopting healthy skills. Once you are equipped with healthy skills and have the support of a coach/counselor/therapist, you can set out a cessation program and work towards coming off of your anxiety and/or depression-related medication(s).

Many people come off of antidepressants without problem, but aren't equipped to stay off of them so they experience a rebound (a return of symptoms and the condition). Working with a qualified therapist can prevent rebounds and help you establish medication-free living.

Conclusions

"Claiming that depression results from a brain-chemical imbalance, as ads do, is problematic on several fronts. Patients who believe this are more likely to demand a prescription. If you have a disease caused by too little insulin, you take insulin; if you have one caused by too little serotonin, you take serotonin boosters."

"Most people treated for depression get pills rather than psychotherapy, and this week a study from Stanford University reported that drugs have been supplanting psychotherapy for depressed adolescents. Clinical guidelines call for using both, and for psychotherapy to be the first-line treatment for most kids. Psychotherapy "can be as effective as medications" for major depression, concluded a study in April of 240 patients, in the Archives of General Psychiatry."

"Numerous other studies find the same. The hegemony of the serotonin hypothesis may be keeping patients from a therapy that will help them more in the long term. The relapse rate for patients on pills is higher than for those getting cognitive-behavior psychotherapy."

"Some Drugs Work To Treat Depression, But It Isn't Clear How - November 18, 2005"
THE WALL STREET JOURNAL, SCIENCE JOURNAL, By Sharon Begley

Update June 10, 2014

On July 11, 2011, the 'chemical imbalance' theory died.

Dr. Ronald Pies, the editor-in-chief emeritus of the Psychiatric Times, laid the theory to rest in the July 11, 2011, issue of the Times with his admission:

"In the past 30 years, I don't believe I have ever heard a knowledgeable, well-trained psychiatrist make such a preposterous claim [about chemical imbalance in the brain], except perhaps to mock it"

"And yes, the 'chemical imbalance' image has been vigorously promoted by some pharmaceutical companies, often to the detriment of our patients' understanding."

"In truth, the "chemical imbalance" notion was always a kind of urban legend - never a theory seriously propounded by well-informed psychiatrists."

In later admissions, pharmaceutical companies said they used the chemical imbalance theory as a "metaphor" and it wasn't ever intended to be understood as an actual imbalance.

Of course, we take issue with Dr. Pies's assertion that knowledgeable psychiatrists didn't believe the chemical imbalance theory. Sure, they did! Why else did antidepressant and anti-anxiety medications soar? Because people were told by their doctors and mental health professionals that they needed them. History speaks for itself.

We also take issue with the pharmaceutical companies' stance that they used the chemical imbalance notion as a metaphor only. From 2002 to 2010, many pharmaceutical company websites and mass marketing campaigns had elaborate illustrations showing, what they portrayed, as the 'actual' chemical imbalance that needed 'correcting.' The quotes from their websites that we included at the beginning of this article clearly demonstrate they weren't intending a 'metaphor.'

Bottom line: The Chemical Imbalance Theory is dead.

For most people with entrenched anxiety and depressive disorders, there aren't any "quick fix" or "miracle" cures. This is unrealistic. Recovery from these conditions typically requires good information, coaching/counseling/therapy, support, application, effort, commitment, perseverance, and patience. And while this work may be difficult, it is the way to resolve these conditions once and for all so that normal and lasting health can ensue.

Be encouraged. Anyone can recover from these conditions with the right information, help, and support. Since these conditions are typically caused by unhealthy behaviors (thoughts and actions) that have been learned, we can learn healthy behaviors that ultimately bring about normal and lasting health. Recovery is not beyond anyone with a desire and commitment to learn.

Since anxiety and depressive disorders are not caused by a biological, chemical, and/or genetic problem that is beyond our control, no one is doomed to a life of struggle. Anxiety and depressive disorders are reversible, and anyone can do it with the right help.

Anxietycentre.com was established for that purpose: **to help those who are struggling with anxiety and depressive disorders.** We do so by providing insightful self-help information in the member's area of our website, and by providing help and support through our personal coaching/counseling/therapy program.

If you are experiencing anxiety or depression, or both, we encourage you to not suffer needlessly. Appropriate help is available. You can overcome these conditions...for good.