Out of the Blue:
Three non-medication ways to relieve depression

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Challenging Myths

• Myths about depression:
  • Cause is known (biochemical and genetic)
  • Despite the ads one sees on TV, the cause of depression is not known and has not been established as biochemical or genetic
  • “For most common diseases, specific genes are almost never associated with more than a 20-30% chance of getting sick,” explains Bryan Welser, CEO of gene discovery company Perlegen Sciences. (Quoted in Wired, Nov. 2009, p. 121)
  • “The strongest predictor of major depression is still your life experience. There aren’t genes that make you depressed. There are genes that make you vulnerable to depression.” –Kenneth Kendler, M.D., Professor of Psychiatry and Genetics Medical College of Virginia, TIME, March, 2001
  • Cause determines intervention
  • Antidepressants are the only effective treatment and they are all that is needed

What This Presentation Offers

• The six strategies: New possibilities for effective intervention
• These are alternate approaches to use with clients/patients with whom your usual approaches have not helped or to supplement your current methods and approaches
My book on the subject

OUT OF THE BLUE
SIX NON-MEDICATION WAYS TO RELIEVE DEPRESSION.
BILL O’HANLON

The Rise in Depressive Disorder

- Rates of depression have radically increased in recent years.
- Treatment for depression has increased by 300% between 1987 and 1997; by 1997, 40% of psychotherapy patients, double the percentage of a decade before, had a diagnosis of a mood disorder.
- The percentage of the population for depression grew from 2.1% in the early 80s to 3.7% in the early 2000s, an increase of 76%.
- Use of antidepressants nearly tripled from 1988 to 2000.
- Immigrants tend to have the same rates of depression as their adopted culture/country rather than the rates of the place from which they came.


Depression can be devastating

Andrew Solomon
(author of “The NoonDay Demon”)

Lincoln’s description of depression

“I am now the most miserable man living. If what I feel were equally distributed to the whole human family, there would not be one cheerful face on the earth. Whether I shall ever be better I cannot tell; I awfully forbode I shall not. To remain as I am is impossible; I must die or be better, it appears to me.”
The Six Strategies

#1 Marbling

#2 Undoing depression

#3 Re-starting brain growth

#1 Marbling

Mapping depesso-land and non-depresso-land

• Investigate times and aspects of non-depression while finding out about depressive experience

Focus mainly on depression could add to the problem

• A recent study shows that extensive discussions of problems and encouragement of “problem talk,” rehashing the details of problems, speculating about problems, and dwelling on negative affect in particular, leads to a significant increase in the stress hormone cortisol, which predicts increased depression and anxiety over time.


Challenging pessimism and building optimism

• One study found that even naturally pessimistic people who spent one week doing exercises in which they identified and wrote down times in the past in which they were at their best, their personal strengths, expressing gratitude to someone they have never properly thanked, and writing down three good things that happened were happier when their happiness levels were measured six months later.


• Seligman reports a study done by himself and Jeff Levy with people who scored as severely depressed in a depression inventory. Participants were instructed to recall and write down three good things that happened each day for 15 days. 94% of them went from severely depressed to mildly to moderately depressed during that time.

Positive Psychology can help alleviate depression

- A meta-analysis of 51 positive psychology interventions with 4,266 individuals
- The results revealed that positive psychology interventions do indeed significantly enhance well-being (mean r 5.29) and decrease depressive symptoms (mean r 5.31).


Acknowledgment and Possibility

- An alternative is to move back and forth between discussions of depression and non-depressive moments and experiences.
- This not only respectfully acknowledges the person’s painful and discouraging experiences, but gives them a reminder they aren’t and haven’t always been depressed.
- It can also illuminate and give hints to skills, abilities and connections that can potentially lead out of depression or at least reduce depression levels.

Letter from Abraham Lincoln to Fanny McCullough after she was distraught over the loss of her father in the Civil War

Dear Fanny

It is with deep grief that I learn of the death of your kind and brave Father; and, especially, that it is affecting your young heart beyond what is common in such cases. In this sad world of ours, sorrow comes to all; and, to the young, it comes with bitterest agony, because it takes them unawares. *The older have learned to ever expect it.* I am anxious to afford some alleviation of your present distress. Perfect relief is not possible, except with time. *You can not now realize that you will ever feel better.* Is this not so? And yet it is a mistake. You are sure to be happy again. *To know this,* which is certainly true, *will make you some less miserable now.* I *have had experience enough to know what I say; and you need only believe it to feel better at once.*

Make maps of depresso-land and non-depresso-land

- Compare and contrast and build maps of feelings, actions, thoughts, focus of attention, interactions and contexts associated with both depressive experience and non-depressive experience
Inclusion

- Permission
- To and not to
  - “It’s okay to feel depressed.”
  - “You don’t have to have hope right now.”
- Inclusion of opposites
  - “You can be hopeless and have hope at the same time.”
- Exceptions
  - “You feel hopeless except when you don’t.”

Discover exceptions, resources and solutions

- Find out about moments of non-depression
- Find out about what happens when the depression starts to lift differently than during it
- Ask why the problem isn’t worse
- Import strengths and abilities from contexts of competence

#2 Undoing depression

- Pattern intervention
- Discover repeating patterns involved with and associated with depressive experience and help the person change those patterns in small or big ways
- Patterns of doing, viewing and context
- Highlight any places around depression that the person has moments of choice

Depression as a bad trance

- Symptom trance vs. coming out of bad trance
- Repetition as trance induction
  - “Your nose is closing; your nose is closing.”
Undoing depression: Case example

Erickson sends a depressed person to the library

How to do a good depression

• Stay still, don’t do anything that makes you breathe fast or hard
• Stay in bed if you can; if not, sit in the same chair or lay on the couch
• Isolate; avoid other people
• If you can’t avoid other people, try to talk to the same person or few people
• Talk to them about the same topic, usually how depressed/unhappy you/they are
• Sleep during the day and have insomnia at night
• Brood on the past, fears, faults and resentments
• Imagine the future will be the same or worse than the past or present
• Eat terribly; overeat or undereat (whichever one you specialize in), eat junk foods, sugar, fat
• Don’t pursue hobbies, passions or spiritual interests
• Drink alcohol, smoke cigarettes, and/or use other drugs
• Don’t ask for help

Undoing depression: Identifying patterns

• Location/places
• Activities
• Timing/Duration
• Sequences
• People

#3 Restarting brain growth

• The neurogenic/neuroatrophy hypothesis and how to use it in treatment
The New Brain Science

- Old view: Brain had fixed structure and set number of brain cells, which declined over the aging process and with damage from trauma.
- New view: Brain plasticity
  - Brain can grow new cells and make new connections throughout life.
  - Brain and body experience alters the structure and connections in the brain, strengthening, growing or weakening them and changing structure.

Neurogenesis and Exercise

- Sharon Begley

Neurogenic/Neuroatrophy Hypothesis

So far, the evidence for the theory is sketchy. Recent findings show a pattern that fits with the theory, though.
Stress, which plays a key role in triggering depression, suppresses neurogenesis in the hippocampus.

Scientists have also found evidence that the hippocampus shrinks in people who have had long-standing depression.

Antidepressants, on the other hand, encourage the birth of new brain cells.

Animals must take antidepressants for two or three weeks before they bump up the birth rate of brain cells, and the cells take maybe another two weeks to start functioning. That's consistent with the lag time antidepressants show before they lift mood in people.
Neurogenic/Neuroatrophy Hypothesis

If an antidepressant is given during a period of chronic stress, it prevents the decline in neurogenesis that normally occurs.

Neurogenic/Neuroatrophy Hypothesis

People with head injuries in early adulthood experience higher rates of depression over their lifetimes.

Neurogenic/Neuroatrophy Hypothesis

Exercise, which combats depression in people, also promotes neurogenesis in the hippocampus.

Neurogenic/Neuroatrophy Hypothesis

So does electroconvulsive therapy, popularly known as shock treatment, which works in human cases of severe depression.
Neurogenic/Neuroatrophy Hypothesis


Neurogenesis/Neuroatrophy Hypothesis

• Postmortem studies have shown that depressed patients had decreased hippocampal and cortical BDNF levels

• Several studies have shown increased BDNF when people are treated with anti-depressants for some time


Neurogenesis/Neuroatrophy Hypothesis

• 27 depressed patients and 19 control participants were presented with visual images intended to evoke either a positive or a negative emotional response. While viewing these images, participants were instructed to use cognitive strategies to increase, decrease or maintain their emotional responses to the images by imagining themselves in similar scenarios.

• Experimenters used functional magnetic resonance imaging (fMRI) to measure brain activity in the target areas. The scientists examined the extent to which activation in the brain’s reward centers to positive pictures was sustained over time.

• The experiment found that depressed patients showed normal levels of sustained activity in the reward centers early on in the experiment. However, towards the end of the experiment, those levels of activity dropped off precipitously.


The mechanisms for brain cell growth (neurogenesis)

• IGF-1 (insulin-like growth factor)

• VEGF (vascular endothelial growth factor)

• BDNF (brain-derived neurotrophic factor)
  “Miracle Grow for the brain”
What affects brain growth and connection?

- Learning new things that stretch your abilities (not too much) and repeating those things through deliberate practice
- Top things
  - New language
  - Music
  
  Among expert musicians, certain areas of the cortex are up to 5% larger than in people with little or no musical training, recent research shows. In musicians who started their training in early childhood, the neural bridge that links the brain’s hemispheres, called the corpus callosum, is up to 15% larger. A professional musician’s auditory cortex – the part of the brain associated with hearing – contains 130% more gray matter than that of non-musicians.
- New physical abilities (juggling, typing, and so on)
- Exercise (vigorous aerobic)

Dr. Dean Ornish on exercise, nutrition and brain growth

Exercise and brain blood vessel growth

In people ages 60-80, those who aerobically exercised 3+ hours a week over the course of 10 years showed:

- An increase in the number of large blood vessels in the cerebral region of the brain
- An increase in blood flow in the 3 major cerebral arteries
- The cerebral area controls consciousness, memory, initiation of activity, emotional response, language and word associations
- Narrowing and loss of blood vessels may be associated with cognitive decline

Exercise and Mood Disorders

- Growing evidence of strong and lasting effects of exercise on depression and anxiety, as well as anger
- Beats medications in some trials for lingering positive effects
- Has been shown to work on people who are not responding to medications

SMILE
(Standard Medical Intervention and Long-Term Exercise)

- **156 adults**, diagnosed with **Major Depression**
- Randomly assigned to 3 treatment groups
  1) **Exercise** treatment
     - Exercise consisted of brisk walking, jogging or stationary bicycle riding 3x/week
     - 10 min. warm-up, 30-min. exercise, 5-minute cool down
  2) **Zoloft** treatment
  3) **Combined** treatment


At the end of 4 months, 60-70% of the participants were “vastly improved” or “symptom-free” in all 3 conditions

On 10-month follow-up:
- 38% of Zoloft condition subjects had recurrence
- 31% of the combined condition had recurrence
- 8% of the exercise only had recurrence (and people who continued to exercise were less likely as a group to have recurrence)

Hypothesis: Self-efficacy; brain growth
**SMILE**
(Standard Medical Intervention and Long Term Exercise)

How much exercise matters:
**Every 50 minutes of exercise per week correlated with a 50% drop in depression levels**


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**Exercise and Mood: Depression research**

Two studies found:

- People who participated in **moderately intense aerobics**, such as exercising on a treadmill or stationary bicycle - whether it was for **three or five days per week** - experienced a **decline in depressive symptoms by an average of 47% after 12 weeks**
- Those in the **low-intensity exercise groups showed a 30% reduction in symptoms**
- **Exercise also helped people who were unresponsive to medications**


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**Exercise and Mood: Depression research**

A **Purdue University study** found:

Middle-aged runners who had been **running 3-5 times/week for 3-10 years** were **markedly less depressed** than a matched comparison group.


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**ACTIVE (Advanced Cognitive Training for Independent and Vital Elderly) Study**

- Cognitive/brain training that increased speed of processing in the elderly decreased the likelihood of developing depression (compared with a control group) by 38% as measured one year out.

Exercise improves mood in elderly

- Seniors who had never exercised before experienced a mood-lifting effect (less depression and anxiety and better reported quality of life) from regular aerobic exercise (3X/week on alternate days for 6 months).


- Exercise worked as well as an antidepressant medication in relieving minor depression in seniors, and had the added effect of improving physical functioning (such as walking more briskly).


Exercise and Mood: Depression research

- **A University of Virginia study** found:
  - Exercise had the **most profound mood-lifting effect on people who were depressed**
  - The **effect increased with the amount of exercise**
  - The study also found **reductions in anger and anxiety** through exercise


- Beware of “overtraining,” or exercising too much (as in anorexia and other compulsive problems)

  - The **evidence shows that over-exercising** (exercising several times a day at training levels that are at or near maximal) is **correlated with depressed moods**

How to translate this in clinical work

- Consider doing “walking sessions”
- Encourage clients/patients to move as much as they are able

Getting people to exercise

- Walking sessions
- Baby steps
- The solution-oriented method
- The buddy system
- Linking to motivation
- Away from/toward

THANK YOU

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