

Full Recovery of Eating Disorders

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Abstract

Research on neuroplasticity of the brain provides scientific hope for those seeking treatment for eating disorders. Despite numerous variations of opinions on how to modify treatment recommendations for those with treatment-resistant or chronic eating disorders, the brain's ability to create new brain cells and develop new connections between neural pathways suggests that full and complete recovery is possible.

Keywords: *Treatment-resistant; Chronic; Eating disorders; Full recovery; Neuroplasticity*

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One in five women struggle with an eating disorder or disordered eating (National Institute of Mental Health), and eating disorders have the highest mortality rate of any mental illness (Hay & Touyz, 2015). The combination of these statistics is horrifying. It is relatively common knowledge amongst mental health professionals that eating disorders are notoriously difficult to treat. How do the mindsets of eating disorder treatment professionals impact their clients who have relapsed multiple times or who would be considered by some to have a treatment-resistant eating disorder? Current literature includes terminology such as “treatment-resistant” (Martin 2011, Strober 2004), “severe and enduring” (Arkel & Robinson, 2008, Hay & Touyz, 2015, Mitchinson., *et al.* 2013, Touyz., *et al.* 2013, Treasure., *et al.* 2015), “chronic” (Fox & Diab, 2015, Dawson., *et al.* 2014, Martin, 2011, Strober 2004, Tierney & Fox, 2009, Wonderlich., *et al.* 2012), and “longstanding” (Bamford & Mountford, 2014). For the purpose of this article, these terms will be used synonymously.

What exactly constitutes a “treatment-resistant” or “chronic” eating disorder? Eating disorder chronicity is described by Strober as being, “a permanence of the disease state in spite of repeated exposures to state-of-the-art therapy.” (Strober 2004). Martin defines treatment-resistant eating disorders as follows: “One may consider the definition of treatment resistance in bulimia nervosa to be that of a patient whose condition has not responded to an adequate trial of an SSRI and evidence-based psychotherapy, such as cognitive-behavioral therapy (CBT). A definition of treatment resistance for anorexia nervosa (of which there are no evidence-based treatments) may include repeated failure to reach or maintain 85% of ideal body weight following multiple attempts with psychosocial interventions (e.g. CBT and psychodynamic therapy), efforts to treat comorbid psychiatric illnesses, and repeated attempts at intensive refeeding (usually in specialized inpatient or outpatient programs).” (Martin, 2011).

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Some studies have defined eating disorder chronicity using duration of illness, such as 5 years, (Andries, *et al.* 2014), 6 years (Fox & Diab, 2015), 7 years (Dawson, *et al.* 2013, Touyz, *et al.* 2013), or 10 years (Arnell and Robinson, 2008). Other studies have used characteristics such as low body mass index, psychosocial impairment, number of treatment stays or hospital stays, and quality of life as criteria for utilizing terms such as “chronic” or “severe and enduring” (Bamford & Mountford, 2012; Maguire, *et al.* 2012; Tierney & Fox, 2009; Wildes, *et al.* 2017, Wonderlich, *et al.* 2012). Despite attempts at making the terminology more quantitative, the current literature continues to use the various terms subjectively and has found no specific subgroups of eating disorders to be evidently “chronic” (Wildes, *et al.* 2017).

There is research that suggests that as duration of illness increases, the numbers of those who maintain eating disorder recovery decreases (Steinhausen, 2002, Martin, 2011). That does not indicate, however, that those who have struggled with their eating disorder for many years should be categorized as treatment-resistant or should be treated any differently than a person with a new diagnosis of an eating disorder, in my opinion. Despite the number of years someone has been struggling with an eating disorder, the number of times they’ve been hospitalized, their BMI, their number of treatment stays, or any other potential indicator of being “chronic” or “treatment resistant,” every single person has a brain with the capability of neuroplasticity and every single person is able to attain full recovery.

Neuroplasticity is the ability of the brain to change, acclimate and grow based on the needs of the person and their interactions with the environment around them (Campbell, 2009). Rebuilding connections of nerve cells, or creating new nerve cell pathways, is known as “re-wiring” of the brain, and connections between cells are infinitely capable of these changes (Campbell, 2009). In my opinion, this means that the brains of people with eating disorders can be re-wired to create new neural pathways, which are no longer solidified in the rewards of the eating disorder.

The Brain That Changes Itself is a book by Norman Doidge filled with anecdotes from people who have experienced first-hand changes in neural pathways and have thus recovered from both physical and mental afflictions. Doidge suggests the concept of the commonly-heard phrase, “use it or lose it,” which is known among neuroscientists as dendritic pruning. Similarly to the way a person can become fluent in a second language and then forget or unlearn the language if they do not continue to use it, a person in recovery from an eating disorder can eventually forget or unlearn the eating disorder language as unused neurons are pruned away. (Doidge, 2010, Gonvalves, *et al.* 2016).

When learning something new, the brain first has to create these new neural pathways, and then continually use the neural pathways by practicing the new learned thoughts and behaviors. As connections are formed between neurons and signals are consistently sent along these neural pathways, the pathways become more and more accustomed to transmitting information. As these pathways are deepened, the new, learned behaviors become easier to perform and eventually become “the norm.” Eating disorder thoughts have to be actively reframed and new recovery-focused neural pathways have to be continually utilized and deepened. Thus, people are literally able to change their brain structure by changing thought patterns and behaviors. (Cramer, *et al.* 2011, Jessberger and Gage, 2014).

Some people may be concerned about the length of time required to develop these new neural pathways, and whether or not they can become as strong as the previously formed neural pathways. In a study by Deshpande, *et al.* (2013), it was found that there is no significant difference between mature brain cells and juvenile brain cells that are approximately eight weeks old. Eight weeks appears to be the approximate amount of time that brain cells need to grow and become fully developed. In addition, Ge, *et al.* (2017) found that neurons which are 6-8 weeks old are actually *more excitable* than mature brain cells! People may also wonder if there is a maximal amount of brain cells that can be developed or if brain cells stop growing at a particular age, but neurogenesis continues throughout adult life, making new learning possible at any age and despite any number of years of previous habits (Campbell, 2009).

I have personally met and interacted with many people who have overcome eating disorders and state that they no longer experience any eating disorder symptoms. Some healthcare professionals and even some treatment centers promote the concept of functional recovery for those with severe and enduring eating disorders, using the lens that the best course of action is to learn to adapt to life with the eating disorder. In my opinion, this compensatory approach to treatment is giving up on people who are capable of full freedom from the disorder. By teaching and encouraging clients that full recovery is scientifically possible, I believe they will be more motivated to comply with treatment recommendations and stay motivated to do the work that is required to fight the eating disorder. The concept of neuroplasticity and the amazing ability of the brain to reorganize its connections and to create new brain cells throughout adulthood provides evidence for hope in full recovery for eating disorders, along with other mental illnesses.

References

1. Arkell J and Robinson P. "A pilot case series using qualitative and quantitative methods: Biological, psychological and social outcome in severe and enduring eating disorder (anorexia nervosa)." *International Journal of Eating Disorders* 41.7 (2008): 650–656.
2. Bamford BH and Mountford VA. "Cognitive behavioral therapy for individuals with longstanding anorexia nervosa: Adaptations, clinician survival and system issues." *European Eating Disorders Review* 20.1 (2012): 49–59.
3. Campbell Celeste. What is neuroplasticity: Brain Line (2009), Retrieved on June 19, 2018 from <https://www.brainline.org/author/celeste-campbell/qa/what-neuroplasticity>.
4. Dawson L., et al. "Doing the impossible: The process of recovery from chronic anorexia nervosa." *Qualitative Health Research* 24.4 (2014): 494–505.
5. Doidge, Norman. *The brain that changes itself: stories of personal triumph from the frontiers of brain science*. Carlton North, Vic.: Scribe Publications (2010).
6. Fox JR and Diab P. "An exploration of the perceptions and experiences of living with chronic anorexia nervosa while an inpatient on an eating disorders unit: An interpretative phenomenological analysis (IPA) study." *Journal of Health Psychology* 20.1 (2015): 27–36.
7. Gage FH., et al. "Survival and differentiation of adult neuronal progenitor cells transplanted to the adult brain." *Proceedings of the National Academy of Sciences of the United States of America* 92.25 (1995):11879–11883
8. Goncalves JT., et al. In vivo imaging of dendritic pruning in dentate granule cells." *Nature Neuroscience* 19.6 (2016): 788–791.
9. Hay P and Touyz S. "Treatment of patients with severe and enduring eating disorders". *Current Opinion in Psychiatry* 28.6 (2015): 473–477.
10. Kondo T and Raff M. "Oligodendrocyte precursor cells reprogrammed to become multipotential CNS stem cells." *Science* 289.5485 (2000): 1754–1757.
11. Maguire S., et al. "The clinician administered staging instrument for anorexia nervosa: Development and psychometric properties." *International Journal of Eating Disorders* 45.3 (2012): 390–399.
12. Martin L. "Chronic Eating Disorders: A Different Approach to Treatment Resistance." *Psych Central* (2011).
13. Mitchison D., et al. "Assessment of quality of life in people with severe and enduring anorexia nervosa: A comparison of generic and specific instruments." *BMC Psychiatry* 13 (2013): 284.
14. National Institute of Mental Health. *Eating disorders: facts about eating disorder and the search for solutions* (2018).
15. Palmer TD., et al. "Fibroblast growth factor 2 activates a latent neurogenic program in neural stem cells from diverse regions of the adult CNS." *The Journal of Neuroscience* 19.19 (1999): 8487–8497.
16. Palmer TD., et al. "FGF-2-responsive neuronal progenitors reside in proliferative and quiescent regions of the adult rodent brain." *Molecular and Cellular Neuroscience* 6.5 (1995): 474–486.
17. Palmer TD., et al. "The adult rat hippocampus contains primordial neural stem cells." *Molecular and Cellular Neuroscience* 8 (1997): 389–404.
18. Reynolds BA and Weiss S. "Generation of neurons and astrocytes from isolated cells of the adult mammalian central nervous system." *Science* 255.5052 (1992): 1707–1710.

19. Richards LJ, et al. "De novo generation of neuronal cells from the adult mouse brain." *Proceedings of the National Academy of Sciences of the United States of America* 89.18 (1992): 8591-8595.
20. Ratnasuriya RH, et al. "Anorexia nervosa: outcome and prognostic factors after 20 years." *British Journal of Psychiatry* 158 (1991): 495-502.
21. Steinhausen HC. "The outcome of anorexia nervosa in the 20th century." *American Journal of Psychiatry* 159.8 (2002): 1284-1293.
22. Strober M. "Managing the chronic, treatment-resistant patient with anorexia nervosa." *International Journal of Eating Disorders* 36.3 (2004): 245-255.
23. Tierney S and Fox JR. "Chronic anorexia nervosa: A Delphi study to explore practitioners' views." *International Journal of Eating Disorders* 42.1 (2009): 62-67.
24. Touyz S, et al. "Treating severe and enduring anorexia nervosa: A randomized controlled trial." *Psychological Medicine* 43.12 (2013): 2501-2511.
25. Treasure Janet, et al. "Has the time come for a staging model to map the course of eating disorders from high risk to severe enduring illness? An examination of the evidence." *Early Intervention in Psychiatry* 9.3 (2014): 173-184.
26. Treasure J, et al. "New treatment approaches for severe and enduring eating disorders." *Physiological Behavior* 152 (2015): 456-465.
27. Wilde Jennifer, et al. "Characterizing severe and enduring anorexia nervosa: An empirical approach." *International Journal of Eating Disorders* 50.4 (2016): 389-397.
28. Wonderlich S, et al. "Minimizing and treating chronicity in the eating disorders: A clinical overview." *International Journal of Eating Disorders* 45.4 (2012): 467-475.

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