International Journal of Diabetes & Metabolic Disorders

Happy Booster: How Positive Attitude Promotes Health, Reduces Stress, Enhances Performance, Accelerates Success, and Boosts Happiness

Cheryl Wang, MD, PhD

LeJia Hotel, WanJia Rd, 50 meter East to the intersection of LiRi St and TaiHangShan Rd, Dongying, Shandong, P. R. China, 257000, China

Introduction

Watching my obese and diabetic patients struggling with body weight and blood sugar control, I saw how important it is to encourage them to practice positive attitude in their daily lives. The biggest challenge for most obese and diabetic patients is not the body weight or blood sugar control, but the rebound afterwards. With comprehensive interventions, more and more obese patients are able to lose weight. Yet, it takes much more effort to maintain the desired body weight afterwards. This makes them more frustrated and stressed out. Their stress hormone cortisol goes up. Excessive cortisol increases fat production and thus further weight gain, which, in turn, becomes a vicious cycle. I keep encouraging my patients using positive attitude to adjust their mood, boost their immunity, regain their strength to fight back. Those well-compliant ones reached a better longterm effect. Simply, with positive attitude, we secret more "happy hormones" and less stress hormone, thus lose more weight and be able to maintain the desired body weight afterwards.

My practice is not alone. Addiction becomes a huge burden of our society and it is extremely worrisome in the adolescents. Over 20 million Americans, almost 10 percent of the population are alcohol or illicit drugs abuse or dependent, which is responsible for over 100, 000 deaths every year, and an overall annual cost over 400 billion dollars in the United States. Physician and scientists at the Harvard Mahoney Neuroscience Institute did a study in adolescents with addiction. It suggested that positive attitude and laughter enhances immunity and increase resistance to addition. Simply, addiction is a hunger for pleasure. It is a brain problem involving changes of the mesolimbic dopamine system, which activated pleasure and reward circuits. These circuits are located at the nucleus accumbens and amygdala. Their changes cause psychological, behavioral and social problems. This can be viewed and tracked with PET scan. The PET scan studies conducted at Osaka University suggested that positive expression such as laughter and smile is associated with improved cognitive function [1]. Laughter makes people feel good, brings pleasure and thus may diminish the need and crave for substance. Study from CDC suggested that optimism has positive impact on personal recovery and mental health after disaster [2]. Furthermore, laughter enhances immunity, stimulates circulation, augments cardiovascular and pulmonary function, improves depression, moderates anxiety, alleviates pain and helps smoking cessation. This is now called positive psychotherapy (PTT).

*Corresponding author:

Cheryl Wang, MD, PhD, LeJia Hotel, WanJia Rd, 50 meter East to the intersection of LiRi St and TaiHangShan Rd, Dongying, Shandong, P. R. China, 257000, China, E-mail: dr.doc.cheryl@hotmail.com

Submitted: 01 Dec 2018; Accepted: 12 Dec 2018; Published: 19 Feb 2019

Positive attitude and activities, optimism moderates stress and improves adjustment in kids, adolescents, adults, elderly, doctors, soldiers, and patients with type 2 diabetes, of acute coronary syndrome, inflammatory bowel disease, non-suicidal self-injury, cancer, and other disorders.

One legend is Dodie Osteen, the co-founder of the largest Christine church in the United States, Lakewood church at Houston, TX. Mama Dodie was diagnosed as terminal liver cancer about 38 years ago. The doctors gave her a notice of a few months to live. Mama Dodie was knocked down. But she never let herself being knocked out. Instead, she started her positive praying. She hung all the positive, energetic pictures on the wall. She prayed every day for healing. Miraculously, she survived. Not only she survived, she is thriving. How do I look at this? As an extraordinary physician and scientist, the first thought coming to my mind is that it may be just a misdiagnosis. She may never have terminal cancer at all. But she was all beaten up and all the test results supported the diagnosis. And then she came back. As a brilliant physician and scientist with positive attitude, I believe it. Here is how. By switching her gear to the happy module, applying healing concept in her mind, practicing positive attitude, Mama Dodie strengthened her immune system, suppressed the tumor growth and eventually beat the cancer, and live a happy life thereafter.

Another legend is Darwin Smith, the CEO of Kimberly-Clark. After being diagnosed throat cancer, Darwin was given months to live. Darwin didn't buy it. It is with that furious determination Darwin survived 25 years and turned Kimberly-Clark into one of the most successful paper-based products companies in the United States.

Positive attitude and activities enhance our performance. Dr. Annette Brose and other scientists from Max Planck Institute conducted a study on the effect of positive and cognitive performance. It showed that high levels of well-being are associated with successful outcomes, and that demanding tasks were easily and successfully fulfilled when people are happier [3]. Another study showed that the outcome ratio of those with positive attitude to normal is 6 to 1, medium positive to normal is 2 to 1, while negative to normal is only 0.3 to 1. From negative to positive, it is 20 times higher. What a difference! Imagine if it is transformed to industrial production. A vast difference could determine the destination of a company. If it is

transformed to the money Google or Walmart is making, how much more they could make if they practice positive attitude at work? Dr. Martin Seligman did a study in the salesman of MetLife [4]. It was found that the optimistic sales sold almost twice insurance as the pessimistic ones. The outstanding leaders at Metlife adjusted their strategy based upon this finding. And of course, it is paid off. Metlife is not alone. As a matter of fact, the brilliant leadership team of Google, Yahoo and Walmart are all the pioneers adapting positivity at work and had significantly increased their annual income. Behind every successful company or individual, there is a moving story more or less based on "positive attitude". These positive attitude and activities not only make them happier, healthier, but primed them work more efficiently and harder, which almost immediately transformed into greater success and larger profit of the company.

In "the happiness advantage", Shawn Achor summarized how much positive attitude in industries increase productivities [5]. Roughly, it promotes sales 4 times; increases engagement at the companies by 31%; enhances customer referral 30%; reduces fatigue by 23%; and almost doubles the likelihood of promotion.

Dr. Martin Seligman did over 25 years research on pessimism and optimism. His studies showed similar results, suggesting that the optimists do better in school, at work, and for elections. Furthermore, his studies demonstrated the capability of my "happy switch"-the feasibility of changing from pessimism to optimism, which is well linked to improved productivity.

Studies showed that those doctors primed to be happy came up with more accurate and faster diagnosis by 19%. Did you hear about that "million-dollar-smile"? By simply saying hello or smiling, it significantly improves patients' satisfaction with care.

Another example is Chip Conley, the CEO of a successful chain of boutique hotels. At the end of every executive meeting, Chip always encourages the executives compliment or recognize somebody, and then have some volunteer deliver that recognition to that person. It created a happy and productive chain.

Creating more positive perceptions of our goals can dramatically increase our engagement, focus, productivity, and motivation and thus accelerates this process. The closer you are to your target, the faster and more efficient you become.

Similar results were found in school performance among students and competing tasks even among 4 years old kids. Interestingly, some study showed that if you memorize sets of positive, neutral, and negative words, and then sleep for about 7 to 8 hours, the next day, you will recall about 80% of all three listed. If you miss a night of sleep or stay up to 36 hours, you will still be able to recall most of the negative and neutral words, but only remember 1/3 of the positive words. This is because that your brain interprets the lack of sleep as a threat to your central nervous system and scans the negative words as additional threats. The movie "the happy Elf" is an entertaining version for kids.

What about celebrities? Lots of successful people are quite happy and happy in their own way.

What about the medical residency training?

Even with the strict 80 hours rule, medical residents burn out all

the time. We doctors are supposed to be the strongest ones. But tragedy happens one after another. It is a huge loss, not only for the family but also for the society. How much effort this beautiful world put into us?

I keep asking myself a few questions: if less stress and more positive environment are adapted in the operating room, how much mortality and morbidities (M&M) of surgery could be reduced? I bet it would be a significant number. Maybe in the near future, we don't have to do M&M every week any more. Based on what I dressed above, I propose that we adapt the "positive attitude" into our operating room (OR) and grand rounds. Instead of using traditional "beating up" coaching, maybe we can try "encouragement coaching" before, in and after OR. For example, once a week, the attending surgeons or senior residents go over the video for the OR case, pointing out the key points, the common M&M and how to reduce or avoid. I hypothesize that it will significantly reduce the morbidities and mortalities. If we could play pleasant music couple of minutes before grand rounds, or simply have the residents complement each other, or telling them how wonderful they are and they will accomplish great things in their lives, I bet it will significantly enhance the outcome of residency training. This world will become more beautiful because of our effort.

In 2015, two medical residents from the internal medicine program of C committed suicide. Lots of stories were kept in the dark. But suicidal medical residents varied from the beginning PGY1 interns to the graduating PGY5 chief residents, from top program like C to small program like M. The burnout and wellness of medical residents were brought more and more attention. It is a tragedy. After 20 years in school, we finally stepped onto the bridge, finishing the final training to serve this beautiful world. Is this bridge too slippery to stand? Is this bridge too tough to get through? If only we could manage stress better, if only we could switch on the happy gear, if only we can live a healthier life, if only we can stand strong, stand tall, if only we can feel what others feel, be nice to each other, if only we remember all those who love us with their whole hearts, if only we could adapt better, if only we keep this beautiful world in our heart other than ourselves. Easy way out is easy way does. Is it the only way? There are other ways around. Do you realize that it is not just about you? It is what impact you bring to this beautiful world. Simply, is it a positive one or a negative one? By letting yourself go, you were set free. Did you consider others? What about your parents, family, and friends who love you? Wouldn't be too much for them? What about the patients who look up to us? What a big fear to them? What about this society who put so much effort into us? Wouldn't be too much waste? Never give up. Never let yourself go. Allow yourself to live, allow this beautiful world see how wonderful you are, you will thrive, sooner or later, one way or another. In this regard, I have a few proposals. First, we can start with playing a minute or two favorite music before grand rounds, morning rounds, OR, try my happy booster second or two whenever possible.

"Happy hormone", positive attitude, cheerful smile, and authentic laughers have bonding effects, and thus draw people close to us. When you are happy, you are cheerful, you spread your joy, sow the seeds, and harvest more in a later time. All added up together, it makes our success much easier, sooner and higher. The movie "happy feet" is an enjoyable version. Because the emotional headquarter, the amygdala can read the emotions of others in as quickly as 33

milliseconds, prime us to feel the same, happiness is contagious, almost immediately. Smile at the receptionist when you walk into the door. Very possibly, you just light her day up. As a result, she smiles at everyone who walks in that door. As such, everybody wears his or her sunshine smile wherever he or she goes. What a beautiful world!

Even more encouragingly, Dr. Martin Seligman, the past president of American association of psychology, professor of UPEN, along with the past chairperson of psychology at Yale University, showed that optimism can be learned, and this learned optimism not only reduces the incidence of tumor in childhood, but also reduces the incidence of tumor in adulthood. Vice versa, the learned helplessness during childhood significantly increases the susceptibility of tumor growth in adulthood. This observation was further supported by the results of neuroscientists.

Dr. Richard Davidson at University of Wisconsin took a look at the neuron changes. It is found that positive attitude can cause permanent changes of neuron in as short as 21 days. That is to say, this learned optimism can be established in as short as 3 weeks. Unbelievable but it is true. This neuroplasticity is like training the muscle. The more you stretch it, the stronger it gets. In another word, this learned happiness will last longer if you keep practicing.

From one side, the positive attitude and activities stimulate the secretion and release of happy hormones, and reduces stress hormone. Four major hormones were identified as "happy hormones". Endorphin is the painkiller. Serotonin is the anti-depressant. Oxytocin is the harmony bonder. Dopamine is the enjoyer. Cortisol is one major stress hormone studied. Many activities such as smile, laughter, chocolate, our favorite food, our favorite movies, shows, music, sex, exercises, Yoga, and meditation all trigger the release of "happy hormone", and reduce stress hormones, increase our immunity, and make us healthier. When we are engaged in those activities, we feel joyful and are less stressed out. We do better. Better performance is followed by bigger success and more sustained happiness. Some of these "happy hormones" are "strength hormones", help you build up the muscles, produce more energy, and thus give you the power and strength to carry on, to feel stronger and to excel easier. On the other hand, these effects change our lives on the molecular, cellular, genetic levels, through neuroplasticity. Even more excitingly, this neuroplasticity, our flexible, plastic and malleable brain, remains active way beyond age of 20, it goes as late as our most senior years. That is to say, it is never too late to change. Not alone that, scientists found that neuroplasticity happens in the immune system as well. This possibly explains why Mama Dodie and Darwin Smith lived that long after being diagnosed as terminal cancer and were given months to live.

Genetic studies from University of Maryland, University of Minnesota, and University of Wisconsin showed varying results but all pointed to one direction: happiness is 1/3 genetic and 2/3 learned condition. No matter where you are, what you have or don't have, you can be happier. Besides, life is too beautiful to live cranky. Life is too short to live upset. Yesterday is over and done. Tomorrow is yet to come. What we really have is now. Life is flying by. Enjoy when you can, not only because you deserve it, it is your power and strength to get through the hardship during the rainy days, to reach your full potential, to succeed in every aspect of your life. Therefore, I created this minute-program to boost our happiness inside out.

Happiness is an emotional feeling, ranging from positive thoughts and responses to intense joy. Dr. Martin Seligman talked about three different lives: pleasant life, good life and meaningful life. Many things could bring pleasant movements and happiness. It can be money for the poor, it may be love for the lonely, it could be trouble-free for the troublesome, it might be promotion for the long under-appreciated, it can be a smile for the long-ignored front desk receptionists. Simply, it can be anything. A good life is positively correlated with close relationships, stable income, and social status. A meaningful life is more about our eternity. What do you want to bring to this beautiful world? A paycheck to pay your bill, a job to get by, or a calling to reach your full potential?

Yet, we live in a real world. Nothing is perfect. Nobody is perfect. Every day, we encounter this or that kind of issue. Sometimes we don't get what we want, or we don't want what we have. Wherever you go, there are difficult situations and nasty people. It puts you down, beats you up. Not only we are not happy, we are all stressed out, we lose our power, and sometimes bad things happen. When we are under stress and pressure, our body secrets much more stress hormone cortisol. Once cortisol reaches a critical point, even the smallest setback can trigger the amygdala response, hitting our panic button. This spurs us into undesired action without conscious thought. It is totally insane. That is why so many patients with post-traumatic stress disorder (PTSD) messed up in their lives, becoming the victims of "emotional hijacking".

Hard to believe, but stress is linked to the sixth leading cause of death, negatively affects almost every organ of our human body. Seventy to 90 percent of doctor visits are stress-related. Up to 70% of working issues are stress-caused.

Things went out of control. You know what? Even we can't control what is happening to us, we can decide how to respond. Trouble may be inevitable, but misery is optional. If you are determined to, you can be happier.

Here is why and how

Under normal condition, our brain works in two modes: default and focused [6]. Under the default mode, we are spontaneously thinking and wandering. Under the focused mode, our brain engages in task-positive network of the neurons and we are enjoying the joyful activities. I call it the "happy" mode. Interestingly, studies showed that the oxygen consumption and energy need are almost the same under both modes. That is to say: it takes same effort whether you try to be happy or not. Besides, happiness helps us in every aspect of our lives. So why not try to be happy, then?

You can be happier if you are determined to do so. All you need is switching your gear to the "happy" mode and remain at "happy" mode. Sounds fancy? It is true. In her book "mindset", Dr. Carol Dweck talked about the fixed mindset and growth mindset [7]. The growth mindset is basically seeing things with a stretchable and grow-able view, one fundamental basis of most successful people. Not only you can be happier, the happiness can sustain because of neuroplasticity. Yet, neuroplasticity doesn't just happen on its own. You have to fuel it and drive it with your own action.

You can. You will. How? Many techniques approved to be helpful. They all have at least one in common: the happy switch. Here comes my minute-program to boost our happiness inside out [8, 9]. You

don't have to deliberately spend any time on it. Whenever you get a moment, try a second or two. It will do.

References

- Iwase M, Ouchi Y, Okada H, Yokoyama C, Nobezawa S, et al. (2002) Neural substrates of human facial expression of pleasant emotion induced by comic films: a PET Study. Neuroimage 17: 758-768.
- Carbone EG, Echols ET (2017) Effects of optimism on recovery and mental health after a tornado outbreak. Psychol Health 32: 530-548.
- 3. Brose A, Lövdén M, Schmiedek F (2014) Daily fluctuations in positive affect positively co-vary with working memory performance. Emotion 14: 1-6.
- 4. Seligman M (1991) Learned Optimism: How to Change Your Mind and Your Life. New York: Knopf.

- 5. Achor S (2010) The Happiness Advantage: The Seven Principles of Positive Psychology That Fuel Success and Performance at Work. Crown Business.
- 6. Amit S (2013) The mayo clinic guide to stress-free living. Da Capo Lifelong Books.
- 7. Carol D (2007) Mindset: the new psychology of success. Ballantine Books Rep Upd edition.
- 8. Cheryl Wang, MD, PhD. Happy booster, How positive attitude promotes health, reduces stress, enhances performance, accelerates success and boosts happiness. outskirtspress, 2018.
- 9. Cheryl Wang, Tongying Zhang, Jiali Wang, Shaoqing Wang, Xiaoyue Xu, Yiheng Wang. Our family chicken soup to all the beautiful you: my gratitude journal to you all. Outskirtspress, 2017.

Copyright: ©2019 Cheryl Wang, MD, PhD. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.