Globe Sound Healing Course Paper, February 2023, Leigh M. Stevens

The Vibration of the Ocean

Abstract

The health benefits of the ocean are profound. The sound of the ocean, the air from the ocean and being immersed in ocean water, all have positive impacts on our physical, mental to emotional health. This paper highlights a variety of ways in which the ocean can support, benefit and even heal us. The history of "Thalassotherapy" or sea therapy and science reinforce this. There is also a section included about the author's own experience with ocean water.

Introduction

The ocean directly impacts our lives as humans, including creating over half of the world's oxygen (according to NOAA) and covering 70% of the earth's surface. It is critical in regulating our climate and weather; for example, the ocean absorbs one-third of human-caused carbon dioxide emissions. Beyond the more obvious uses for marine transportation and recreation, there lies a whole field of science and historical evidence for the ocean as a resource for physical, mental and emotional health.

Sound

We learned from David Gibson in the Sound Healing "Sounds of Nature" class that there are three main types of sound found in nature:

1) sounds from animals that make sound but don't sing
2) sounds from animals who do sing (like whales)
3) all the sounds that wind and water make which is white noise

The ocean falls into the third description of white noise. White noise is an incomplete wave form, i.e., it makes an incoherent frequency. According to Gibson, white noise has been shown to break up stuck frequencies. Examples are repeating frequencies like trauma (signals in the brain) and stuck emotions. So the sound of the ocean can get rid of stuck emotions and thereby bring us back to ourselves. This can have the associated benefit of reducing stress and anxiety, which can be created by repeating loops in our brain. The sound pattern of waves and their harmonic frequency has been studied and is apparently one of the most relaxing sounds for us to hear. The sound of the ocean can decrease cortisol levels in our body which decreases stress. (panamunaproject.com.au)

This is reinforced by Orfeu Buxton, an associate professor of bio-behavioral health at Pennsylvania State University. The ocean waves have a more gradual and gentle character, even if punctuated by crashing waves. The more calming low-frequency undertones of ocean waves crashing contrasts with other kinds of white noise such as an air conditioner, fan or wash machine, which are not intrinsically calming, but tend to mask other chaotic sounds that can be alarming. For example, the sounds of a city such as a car alarm, siren, or scream. (from WellBeing.com.au). The slower, continual sounds of the ocean are non-threatening, so it sends our brain the message that we can relax and can feel calmer, decreasing anxiety and inducing a state of calm. This is also why the sound of the ocean can help one sleep. There are no threatening sounds emanating from the ocean.

Therefore, as taught by Gibson, all of nature, including the white noise of the ocean, is designed to bring us back to ourselves. Once repeating stuck emotions are cleared, what's left is our own natural rhythm such as the rhythm of our heart and rhythm of our brain when we are at peace.

Physical Health

There are numerous examples and studies of how sea water can help aid and improve physical health. This is not a comprehensive review of all ways in which sea water can help heal, but an overview of some of the ways in which it can.

The elemental properties of ocean water are such that it can be helpful for healing skin conditions and wounds, for example psoriasis and eczema. Salt is naturally anti-bacterial; hence, ocean water being helpful for wounds, and salt water is highly detoxifying and helps remove impurities from the body and skin. Some of the supportive minerals which exist in ocean water are sodium, chloride, sulphate, magnesium, potassium, and calcium. (from medicalnewstoday.com). Iodine is also found which can help fight infection and boost the thyroid function. (from fractalenlightenment.com)

A notable and amazing fact is that our blood plasma and seawater are 98% the same. A French doctor, René Quinton discovered in 1897, that our blood has an extra molecule of iron. Seawater has an extra molecule of magnesium. That is the difference.

According to Allergy UK, people who live on the coast or regularly swim in the ocean have healthier respiratory systems. Sinuses can be flushed out by swimming in the ocean and thereby reduce inflammation. This can help with allergies and sinus issues.

Thalassotherapy (the Greek word "thalassa" means "sea") was documented as starting in the 19th century in France, but possibly started much earlier. This is the practice of using seawater and other marine products such as algae, seaweed and mud therapeutically. In addition to increased blood flow and reduced inflammation, joints, arthritis and elasticity of the skin can be supported by seawater therapy. An example of how this works is that when in seawater, sodium and chloride can penetrate the skin and enter the body. Those minerals then affect skin cells by altering the pressure inside them which in turn may inhibit cell death. "Sodium and chloride are also essential for the normal functioning of all body cells, including the cells involved in the immune response." (from news-medical.net)

In 2020, there was a study which investigated the effect of seawater therapy on people who had experienced a stroke and found improvement in pain, balance and mobility as a result.

"Even walking barefoot on sand neutralises the impact of free radicals in our body as sand contains minerals required by humans." (from fractalenlightenment.com) The negative charge of the earth can balance out the abundance of positive electrons that build up in our bodies. As we are increasingly exposed to more electromagnetic frequencies (through things like mobile phones, laptops and microwaves) and therefore, unhealthy free radicals within our body (which causes cellular damage and in turn can speed up the aging process and foster disease), finding ways and environments in which we can relax, repair and restore ourselves is important for quality and longevity of life.

The ocean can also provide cold water therapy. Cold ocean water helps blood vessels to circulate oxygen to muscles and at the same time, reduce swelling. This helps one's body to repair itself. With an increase in blood flow, immunity and muscle recovery can be boosted. (from treetribe.com) The boost

with immunity happens in part because after an ocean swim, our body's red blood cell count increases between 5-20% and white blood cells may increase even more. This can help with our body's ability to fight off viruses and bacteria. The boost with muscle function (and blood coagulation, nutrient metabolism and other things), the absorption of magnesium through contact with ocean water enables our bodies to take in this fourth most abundant mineral in the human body. (from escapehaven.com)

There have been studies that show swimming in the sea can potentially add years to one's life.

Mental Health and Creativity

In addition to all the physical benefits of being in, on or beside the ocean, there is most certainly a mental and emotional benefit as well. Studies on ocean swimming have shown to decrease symptoms of anxiety and depression. (from treetribe.com)

Much is written about the negative ions in the waves of the ocean which are generated by the motion of the water. Simply breathing sea air which contains droplets of sea water, can help infuse negative ions into our body which can speed up our body's ability to absorb oxygen. Another impact of negative ions in the body is to cause reactions that increase serotonin, a neurotransmitter (carries messages between nerve cells), that helps alleviate depression, relieve stress and increase energy. Additionally, "During immersion in water, a hormone called catecholamine is released in the body, which helps to relieve stress." (from the book Blue Mind, by W. Nichols) Therefore, there is science behind what happens in our bodies and minds while being exposed to sea air and water.

From a creativity standpoint, simply looking out onto the ocean can help us be held less captive by our minds given we're looking at nature and the natural phenomenon of fractals, rather than something man-made like a city scape (a fractal can be described as an object whose parts are similar to the whole; a geometric shape which continues in an infinite pattern). Our eyes constantly scan our environment and when they have something natural to rest on, such as looking at trees, plants and the ocean, it is peaceful for us.

When one is in a calmer, more relaxed state as evidenced above with negative ions, serotonin and catecholamine, one is typically not engaging the amygdala, i.e., the part of the brain responsible for flight or flight. This allows for more energy and focus to be channeled to creativity and expansive thinking as witnessed historically, for example, by many famous artists who were drawn to the sea to paint what would become masterpieces, i.e., Claude Monet, J.M.W. Turner.

My Own Experience

My motivation for researching this topic is because I wanted to learn more about why I feel and sleep so well, when I'm in, on and/or near the ocean. I certainly know being held by Mother Earth when floating on my back in ocean water, feels so sacred, releasing and restful. There is most certainly a spiritual aspect to it for me. Reading more about the science and history of it all, though, increases my awareness as to why the ocean has such a positive impact on me.

After swimming in the ocean, I feel invigorated and revitalized and now I understand this is in part due to the therapeutic minerals contained in the ocean and of course the exercise. In addition, the sound of the ocean has always captivated me. It is a sound to which I love to fall asleep and wake up. Even the strong sound of crashing waves is still soothing and now I understand it's due to the gradual building of

the waves ebbing and flowing, calming low-frequency undertones and the white noise nature of the ocean having the effect of clearing stuck frequencies and emotions.

After a day at the beach, I feel tired but in a very satisfying and non-lethargic way. I typically have the best sleep after being at the beach. I had not previously known about the concept of "grounding" which was researched and presented by another Globe student, Sarah Andrews, in 2022. She writes in her paper, "Earthing, or grounding as it is also called, is the act of your body coming into direct contact (through your skin) with the earth, usually by standing barefoot on it (or swimming in natural bodies of water such as the ocean, lakes or rivers). When you make this contact, your body is able to access the natural electrical field/conductivity of the earth's surface, which is absorbed by your body, and you then immediately become 'grounded'." This concept of grounding exactly describes why walking barefoot in the sand is beneficial, in addition to the science about neutralizing free radicals in our bodies.

In conclusion, my intent is to live by the ocean as it not only has all the physical therapeutic properties described, but the mental and emotional benefits as well. It's such an amazing feeling to receive the healing vibration of the ocean!

References

www.news-medical.net "Sea water strengthens the body against viruses, low defenses, bacteria and pathogens", University of Alicante, October 29th, 2012

www.naturalnews.com "Oceans, Plants, and Humans - Closer Than You Think", by Mike Donkers, Wednesday, November 21, 2007

www.panamunaproject.com.au "5 Healing Powers of the Ocean" by Panama Team, December 4th, 2021

www.fractalenlightenment.com "The Healing Power of the Ocean" by Garima Roy, August 28th, 2014

www.treetribe.com "The Healing Powers of the Ocean" by Sage, January 10th, 2017

www.livescience.com "Why Does the Sound of Water Help You Sleep?" by Adam Hadhazy, January 18, 2016

www.escapehaven.com "The Blue Zone: How the Ocean Heals Body, Mind & Soul" by Kelly Alexander, April 29th, 2019

Blue Mind, by Wallace J. Nichols, July 22nd, 2014, published by Little, Brown & Company

World Economic Forum www.weforum.org