

Determining the Course of Treatment for an Amputee

Michelle Wegrzyniak

Sport and Medical Sciences Academy

March 9, 2020

### Determining the Course of Treatment for an Amputee

Amputees have always been seen as, “invalids.” (Udosen, Ngim, Etokidem, Ikpeme, Urom, & Marwa, 2009) in society. In the military, soldiers are more prone to amputation because of the violent experience they face for defending their country. While the average stoic soldier displays themselves as determined, stubborn, and emotionless, not every human can. Fighting through any issue, the stoic soldier will persevere with the loss of the limb, however the regular civilian will have a rough time adapting to the prosthetics. Prosthetics are a substitution and solution for a lost limb, that offers a wide range of basic functions for the amputee (Prosthetics: artificial limbs: limb replacement for amputees, n.d.). Although even with this wide variety of options, because of the different personalities and mindsets of individuals, soldiers and regular civilians have different ways of creating this accepting environment around their false limb. A patient’s personality type is vital to predict how a patient views their body so that physicians can aid the patient through treatment. Although, the success of these artificial prosthetic devices has been hindered by the patient-doctor relationship since becoming available to a wider audience (Girgis, 2018). Due to the unethical prejudice forced onto the patient by the practitioner, this jeopardizes the patient-doctor relationship. For patients to accept and ease into having a prosthetic, treatment must not be based on fitting every single patient into one stoic category, but focusing on how the different personality types accept treatment.

Personality types can be used to predict how a patient views their body so that physicians can better help the patient through the treatment process. For example, soldiers are more likely to have a uniform stoic/choleric personality type compared to the general public whose personality types range from sanguine, phlegmatic, to melancholic (4 primary temperaments, n.d.) . Current

protocols focus on treatment for the stoic personality because of the success in the military. The physical health of a soldier, however, is tightly controlled through discipline. Nancy Sherman describes their stoic personality in *Stoic Warriors* writing about the personality in soldiers. Sherman writes, “The Stoics ‘show concern for nothing but the mind, as if human beings have no body... the amount of bodily advantages has no relevance at all.’” (Sherman, 2005). The physical body must endow anything that the mind desires. The body is a machine that needs to be controlled by the mind so that it does not become a burden or fail . In situations where the body has more control over the mind, the stoic will go to great lengths to restore the balance . (Sellars, 2018). When a soldier is wounded and left without a limb, the body is no longer able to run, jump, climb, or lift. The mind has lost control over the body and therefore is left with a choice to either find a resolution and restore the body or learn to live with the burden of the body. If the soldier chooses to live with the burden, then they will be forced to depend on family, specialist, or aids that will help them remain as independent as possible. Tasks that were easy before will become a burden and a new relationship between the mind and the body will be formed. However, this is not the decision that a stoic will choose because it restrains the body by leaving it helpless.

Prosthetics are the answer, especially for amputee soldiers. These artificial devices give them back power and the ability to regain control over their body. Prosthetics use electric impulses from the mind to send signals to the body so that it can react to the command given (Muderis & Ridgewell, 2017). The soldier is able to accept the prosthetic since it is an object, similar to their own body. The body is an object that needs to be controlled; this idea does not stray far from the artificial limbs that are objects for control. The limb itself will therefore do

whatever task the mind will give it, since the limb is useless without the mind. This restores the superiority of the mind and gives the soldier the ability to return to work. Koebler writes that, “...it's the soldier's drive, not their prostheses, that allows them to return to work.” (Koebler, 2012). The stoic mindset of the soldier will be exactly what allows them to return to their civilian lifestyle. Their dedication in therapy, and rehabilitation, all lead to core strengthening in their core, which leads to an optimal stability in the body (Maucort, 2016). The mind is focused on controlling the body and keeping it in tight discipline that it forgets about its own personal health, leaving the stoic in denial of mental health.

The stoic's denial of emotional health is opposite from a sanguine patient, who has a stronger connection to the mind but a little amount of awareness to the physical condition of the body. A sanguine patient, will put a smaller emphasis on any medical complication because of their image of seeing no fault in their body (4 primary temperaments, n.d.). They find no fault in their body because they connect both their body and mind as one. They tend to focus on their identity, and their interactions with others. With a sanguine personality, one is more present in their social interactions, displaying exceptional communication. A sanguine patient, feels negativity toward prosthetics since they struggle with incorporating the artificial limb as part of their body. The body is closely connected to their personal identity, due to reassurance from social approval (Sharry, 2018) . An artificial limb therefore replaces a part of a body to regain function that is otherwise impossible. It is a tool to fix a body part that is malfunctioning. The fixing of the body, however, makes the patient feel uncomfortable about their identity, since a part of them is constructed wrong and needs replacing. A strong sense of identity like in a sanguine, will force the patient to reject the limb since the prosthetic is not a means of aid but an

attack on the individual, telling them that they have a defect, a disability (Li & Brånemark, 2017). In *Geek Love*, the sanguine protagonist is offered a prosthetic, which he rejects by saying, “you figured it wrong .The whole thing. You’ve got yourself a little old disability so you took pleasure in feeling sorry for me. Well, You figured wrong” (Dunn, 1989). In the protagonist's situation, by agreeing to take the prosthetic, that would mean agreeing to have a disability. A disability is a negative outlook on a body that society sees unfit, which would upset and affect a sanguine.

The way a physician introduces the prosthetic to a sanguine patient strongly determines their acceptance of the artificial limb. The reason that prosthetics have worked so effectively with the body is due to the acceptance of the limbs by the patient. If we compare the personality types of a stoic and a sanguine, one views their body as an object and the other as an extension of their identity (4 primary temperaments, n.d.). The stoic has a personality that is better at accepting the prosthetic since it is just an object; an object that needs to be controlled and disciplined in order to operate at its maximum performance. For this reason, prosthetic limbs have been successful in the military forces when soldiers use them to regain power over their body (Oatman-Stanford, 2012) . Although, specialized treatment for amputees should not be based on one type of personality, since this is highly unrealistic for other patients. In a sanguine, the simple acknowledging the option for a prosthetic may cause the patient to become defensive against both the doctor and the prosthetic (4 primary temperaments, n.d.). The doctor is not seen as a caregiver by the sanguine patient, he is seen as a member of society, who is showing disapproval of the patient’s body and identity, therefore introducing the option for a prosthetic. Doctors need to improve how the information is presented to the sanguine patient to promote

acceptance. The approach needs to be less demanding and more unrestricting, so that the patient has more control about treatment going forth. Giving power back to the patient regarding freedom to choose will allow the patient to determine what is the best option for them.

Phlegmatic patients have an easygoing, compliant attitude focused on preventing hurt in others around them, unlike a stoic whose focus is on controlling their emotions from blurring their judgment. This type of patient does not react with anger or fear, instead remains logical and compliant with treatment protocol, while respecting patient-doctor interactions (4 primary temperaments, n.d.). In most cases, a phlegmatic patient will return to their normal routine to prevent upsetting others around them with a diagnosis. In Rebecca Skloot's novel *The Immortal Life of Henrietta Lacks*, the protagonist Henrietta Lacks, reflects a phlegmatic patient since she remained compliant and solution oriented when diagnosed with cancer. She was aware of her condition and did not think twice about rejecting treatment, instead treatment was her solution. The day before the start of her treatment, Henrietta said to her husband, "Doctor's gonna fix me right up" (Skloot, 2011). Her easygoing attitude about cancer treatment reflects the attitude of a phlegmatic. Lacks reaction to prevent inflicting upsetting emotions onto their close ones is different from a stoic or sanguine.

Prosthetics are the solution for a stoic patient, but for a phlegmatic patient they are an option. When looking at prosthetics, phlegmatic patients can be easily persuaded to do what the doctor tells them. Based on Bill Gallagher's article, the patient is known to comply with authority even if they disagree (Gallagher, 2007). Medical practitioners should be aware that phlegmatic patients comply with orders. The way the prosthetic is introduced is key to ensure physicians are not forcing the option on the patient. Introduction of the prosthetic is key so that the patient has

complete choice regarding treatment (Woods, 2018). If the patient is forced but not fully committed to the treatment, then they will not be able to utilize the prosthetic to its full potential. The prosthetic works by reading electric signals from the brain. If the mind is not convinced on utilizing the prosthetic, then the mind will hinder firing electrical signals to the artificial limb (). This can be prevented if the physician can learn to introduce treatment options without bias so that the patient has the choice. Time is an important factor in decision-making. It must be used correctly to give the patient time to decide but not time to help avoid a decision. The doctor must work with the patient and help in whatever way the patient may need. If the patient freely decides to choose to utilize the prosthetic then they will be more successful at using its full potential compared to if the idea was forced on them.

Melancholic patients seek, but never feel mastery or harmony of their physical body; they may have unrealistic expectations for the future. Rudolf Steiner describes the melancholic patient in *The Four Temperaments*, dated back to Hippocrates' time where man were expected to be masters, masters of all things including their physical bodies (4 primary temperaments, n.d.). Being a master implies full knowledge about what the body does, how the body operates, and how to resolve a problem with the body. Melancholic patients desire to be the inventor of their own bodies. However, as long as the individual is encapsulated in a physical body, he can never feel like the master of it. An amputee cannot be the inventor and the machine. Steiner writes that, "The inner man has no power over his physical system; he feels inner obstacles." (1968). A melancholic patient directs all their strength to overcome those obstacles that do not allow him to have mastery of his body. The obstacles that cannot be overcome cause the greatest sorrow for the patient (Steiner, 1968). Therefore is left gloomy and lives in a life filled with pain, pain that

derives from his inner body. With a routine, a melancholic amputee can master the signals that allow control over the artificial device, therefore being one step closer to overcoming such obstacles.

For a melancholic patient, prosthetics would be the last resort. The goal for this patient may be to overcome an amputation, but realistically, the limb is still gone causing differences in the brain pattern. A melancholic patient, described by Bill Gallagher, is known to have unrealistic expectations since they invest all of their energy into overcoming their obstacle (Gallagher, 2007). They believe that they are in control, but fail to realize that there will be no regained function in that limb. Although, prosthetics could benefit a melancholic's mental health because a great sum of energy would be put forth into mastering the way of thinking with a prosthetic (an obstacle). If not for this challenge, the pain and sorrow from failing to overcome the obstacle would leave permanent damage that may hinder the patient from trying another treatment option. Doctor-patient relationships concerning melancholic patients need to be about redirecting internal pain to an external source so that the patient can be prepared to overcome their obstacle or fail (Steiner, 1968). The patient's perception has been altered by internal sorrow and pain. The patient must see that the pain that he or she experiences is all internal, caused by his or her own temperament. The healthcare provider, whether this be the physician or therapist, can help the patient realize that the internal pain is controlled by his or her innermost-human. If they can realize that pain can be changed, then they will be able to make clear decisions about moving forward.

The solution to restoring the doctor-patient relationship and allowing prosthetics to prosper again lies in understanding the patient. Patients are unique and it is difficult to say that



they distinctly fit into one personality type. One's personality can range from stoic, sanguine, phlegmatic, to melancholic, therefore determining the proper presentation of a prosthetic. Some of the personality types may overlap and therefore their approach to their bodies may be different. Although, refirming a prosthetic is not enough. Physicians must take on the challenge to not only learn about their patients, but introduce therapy and exercise into their daily routine to ensure capability for a patient going forth. Treatment for patients should not only be based on a stoic personality because even a stoic can have a rough transition from fulltime military to civilian lifestyle (Oster, Morello, Venning, Redpath, & Lawn, 2017). Not every patient will be suited for a prosthetic, but it is up to the physicians to decide the best approach. Production of artificial devices won't stop, but the approach can. Patients should be informed and encouraged into the treatment protocol starting with the first interaction because doctor-patient relationships are about informing, not demanding.

## References

- 4 primary temperaments. (n.d.). Retrieved March 5, 2020, from <http://fourtemperaments.com/4-primary-temperaments/>
- Dorr Goold, S., & Lipkin, M., Jr (1999). The doctor-patient relationship: challenges, opportunities, and strategies. *Journal of general internal medicine*, 14 Suppl 1(Suppl 1), S26–S33.
- Gallagher, Bill. (2007, January 4). *Connecting with your patient's unique personality type*. Retrieved February 13, 2020 from <https://www.rsnhope.org/health-library/connecting-patients-unique-personality-type/attachment/connecting-with-your-patients-unique-personality-type/>
- General Principles of Amputation Surgery. (n.d.). *UW Orthopaedics and Sports Medicine*. Retrieved March 5, 2020, from <https://orthop.washington.edu/patient-care/limb-loss/general-principles-of-amputation-surgery.html>
- Girgis, L. (2018, April 27). Why doctors are losing the public's trust. Retrieved March 5, 2020, from <https://www.physiciansweekly.com/doctors-losing-publics-trust/>
- Koebler, J. (2012, May 15). New prosthetics keep amputee soldiers on active duty. *U.S. News and World Report*. Retrieved February 13, 2020, from <https://www.usnews.com/news/articles/2012/05/25/new-prosthetics-keep-amputee-soldiers-on-active-duty>
- Li, Y., & Brånemark, R. (2017). Osseointegrated prostheses for rehabilitation following amputation : The pioneering Swedish model. Osseointegrierte Prothesen zur Rehabilitation nach Amputation : Das wegweisende schwedische Modell. *Der Unfallchirurg*, 120(4), 285–292.

- Maucort, Sierra J. (2016). *Physical therapy and above-knee amputation pre-prosthetic rehabilitation: a case report*. Physical Therapy Scholarly Projects. 585.
- Muderis, M., & Ridgewell, E. (2017, September 26). Bionic limbs. *Australian Academy of Science*. Retrieved March 5, 2020, from <https://www.science.org.au/curious/people-medicine/bionic-limbs>
- Oatman-Stanford, H. (2012, October 29). War and prosthetics: how veterans fought for the perfect artificial limb. *Collectors Weekly*. Retrieved March 5, 2020, from <https://www.collectorsweekly.com/articles/war-and-prosthetics/>
- Oster, C., Morello, A., Venning, A., Redpath, P., & Lawn, S. (2017). The health and wellbeing needs of veterans: a rapid review. *BMC psychiatry*, 17(1), 414.  
doi:10.1186/s12888-017-1547-0
- Prosthetics: artificial limbs: limb replacement for amputees. (n.d.). *LeTourneau Prosthetics*. Retrieved March 5, 2020, from <https://www.llop.com/prosthetics/>
- Sellars, J. (2018, October 2). Humans can't control anything-except our own happiness. *Quartz*. Retrieved March 5, 2020, from <https://qz.com/quartz/1408508/stoicism-says-we-cant-control-anything-except-our-own-happiness/>
- Sharry, J. (2018, March 4). The importance of relationships and belonging. *The Irish Times*. Retrieved March 5, 2020, from <https://www.irishtimes.com/life-and-style/health-family/parenting/the-importance-of-relationships-and-belonging-1.3405948>
- Sherman, N. (2007). *Stoic warriors: the ancient philosophy behind the military mind*. New York: Oxford University Press.

Skloot, R. (2011). *Book club kit: the immortal life of Henrietta Lacks*. New York: Broadway.

Udosen, A. M., Ngim, N., Etokidem, A., Ikpeme, A., Urom, S., & Marwa, A. (2009). Attitude and perception of patients towards amputation as a form of surgical treatment in the University of Calabar teaching hospital, Nigeria. *African health sciences*, 9(4), 254–257.

Wood, M. (2018, October 15). Neuroscientists to develop brain-controlled prosthetic limbs. *University of Chicago Medicine*. Retrieved March 5, 2020, from <https://www.uchicagomedicine.org/forefront/neurosciences-articles/neuroscience-researchers-receive-grant-to-develop-brain-controlled-prosthetic-limbs>