

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Information Engineering



Bachelor thesis

**Data storage as a behavioural therapy for
Trichotillomania**

Author: Sifanur Dokuyucu

© 2021 CLUS Prague

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

BACHELOR THESIS ASSIGNMENT

SIFANUR DOKUYUCU

Systems Engineering and Informatics
Informatics

Thesis title

Data storage as a behavioral therapy for Trichotillomania

Objectives of thesis

The aim of this thesis is to develop a web application, which can help people who suffer from trichotillomania. It will specifically focus on the first part of therapy – noting down the progress. This phase requires detailed information on the date, time and amount of the repeated behavior. The additional objective is to provide available guidelines which can be of much help to the patient.

Methodology

The methodology of this thesis is based on analysis of established and accepted books on Trichotillomania, human psychology, and web development. Based on the synthesis of the knowledge gained, a web application suitable for a potential patient will be created with the vision of showing an alternative way of accumulating personal data during behavioral therapy. The web site will be developed using standard methods of software development.

The proposed extent of the thesis

40-50 pages

Keywords

Trichotillomania , behavior therapy,website,note-taking,data organisation

Recommended information sources

- MORRIS Sarah H, ZICKGRAF Hana F, DINGFELDER Hilary E & FRAKLIN Martin E (2013) Habit reversal training in trichotillomania: guide for the clinician, Expert Review of Neurotherapeutics, 13:9, 1069-1077, DOI: 10.1586/14737175.2013.827477
- NIEDERST ROBBINS, Jennifer. Learning Web design: a beginner's guide to HTML, CSS, JavaScript, and web graphics. Fourth edition. Beijing: O'Reilly, [2012]. ISBN 978-1449319274.
- VAHIA VN. Diagnostic and statistical manual of mental disorders 5: A quick glance. Indian J Psychiatry. 2013 Jul;55(3):220-3. doi: 10.4103/0019-5545.117131. PMID: 24082241; PMCID: PMC3777342.
-

Expected date of thesis defence

2019/20 WS – FEM (February 2020)

The Bachelor Thesis Supervisor

Ing. Petr Hanzlík, Ph.D.

Supervising department

Department of Information Engineering

Electronic approval: 25. 11. 2019

Ing. Martin Pelikán, Ph.D.

Head of department

Electronic approval: 25. 11. 2019

Ing. Martin Pelikán, Ph.D.

Dean

Prague on 15. 03. 2021

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

BACHELOR THESIS ASSIGNMENT

SIFANUR DOKUYUCU

Systems Engineering and Informatics
Informatics

Thesis title

Data storage as a behavioral therapy for Trichotillomania

Objectives of thesis

The aim of this thesis is to develop a web application, which can help people who suffer from trichotillomania. It will specifically focus on the first part of therapy – noting down the progress. This phase requires detailed information on the date, time and amount of the repeated behavior. The additional objective is to provide available guidelines which can be of much help to the patient.

Methodology

The methodology of this thesis is based on analysis of established and accepted books on Trichotillomania, human psychology, and web development. Based on the synthesis of the knowledge gained, a web application suitable for a potential patient will be created with the vision of showing an alternative way of accumulating personal data during behavioral therapy. The web site will be developed using standard methods of software development.

Declaration

I hereby declare to have compiled this final thesis “Data storage as a behavioural therapy for Trichotillomania” entirely myself and in accordance with recommendations of my supervisor, that I indicate all the literature and other supporting materials used in the index of bibliography.

In Prague on _____

Sifanur Dokuyucu

Acknowledgements

I would like to thank Ing. Petr Hanzlík, Ph.D for their advice and support during my work on this thesis.

Data storage as a behavioural therapy for Trichotillomania

Abstract

The aim of this thesis is to develop a web application, which can help people who suffer from trichotillomania. It will specifically focus on the first part of therapy - noting down the progress. This phase requires detailed information on the date, time and amount of the repeated behaviour. The additional objective is to provide available guidelines which can be of much help to the patient.

Keywords: Trichotillomania, behaviour therapy, website, note-taking, data organisation

Ukládání dat jako behaviorální terapie pro Trichotillomania

Abstrakt

Hlavním cílem mé bakalářské práce je poskytnout snadný způsob ukládání a zpracovávání dat týkajících se nejběžnějších příznaků trichotilománie. V teoretické části popisují trichotilománii jako psychickou poruchu, její příznaky a behaviorální terapii jako léčebnou metodu. Praktická část se zaměřuje na popis "počítacího" mechanismu a jak je propojen s grafickou reprezentací, vše je zobrazeno na vytvořené webové stránce.

Klíčová slova: trichotilománie, behaviorální terapie, webové stránky, psaní poznámek, organizace dat

Table of content

1. Introduction.....	12
2. Objectives and Methodology	13
2.1 Objectives.....	13
2.2Methodology.....	13
3. Literature Review	14
3.1 Definition.....	14
3.1.1 comparison with Stereotypic movement disorder	14
3.1.2 comparison with excoriation.....	14
3.1.3 comparison with other obsessive-compulsive and related disorders	14
3.2 Characteristics.....	14
3.2.1 Cause.....	15
3.2.2 Post pulling.....	15
3.3 Diagnostic.....	15
3.4 Body regions	17
3.4.1 Duration	18
3.4.2 Amount	18
3.4.3 Social implications	19
3.5 Statistics	20
3.5.1Age	20
3.5.2.Heredity	21
3.5.3 Culture.....	21
3.5.4 Case Study.....	23
4 Practical part.....	25
4.1 types of therapy	25
4.2 The code	31
4.2.1 Thesis html part explanation	31
5. Results and Discussion.....	41
6. Conclusion.....	42
7. References	42
8. Appendix.....	43

List of pictures

Fig1

Fig2

List of tables

List of abbreviations

1. Introduction

The main purpose of my bachelor's degree work is to provide a simple way of storing and processing data regarding the most common symptoms of Trichotillomania. The theoretical part consists of describing Trichotillomania as a psychological disorder, its symptoms and the behavioural therapy approach as a medical intervention. The practical part focuses on describing the "counting" mechanism (button) and how it is synched with a graphical representation, all of which are displayed on the website created. As the humankind evolved to form complex societies, people's lives have also changed drastically. One of the inevitable consequences of a packed working schedule of a city life is that people get stressed and may form various habits to try to cope with this phenomenon. Some coping strategies are widely known and used such as meditation and exercises on strengthening mental health. Unfortunately, especially teens and young adults may not be educated enough to look after their mental health or sometimes they are just the victim of a faulty gene. In both circumstances various mental disorders can creep on those young souls. The focus on my thesis will be on a disorder that affects an estimated 3.7 million people in the United States (Nassereddine Lamees et al, 2015). It is known as trichotillomania or "trick" among the general public.

2. Objectives and Methodology

2.1 Objectives

The objectives of this thesis are to firstly begin with identifying the most occurring symptoms and triggers. Those symptoms will be further categorised into age groups and personality types. Furthermore, there will be a deep analysis on the roots and history of the illness/disorder. There will be a general search on the availability of similar services as of the website that I will provide. Descriptions of specific individuals/patients and they're perspective on the matter of trichotillomania will be shared. Lastly a conclusion on what can be done better will be presented.

2.2 Methodology

The methodology of this thesis is based on analysis of established and accepted books on Trichotillomania, human psychology, and web development. Based on the synthesis of the knowledge gained, a web application suitable for a potential patient will be created with the vision of showing an alternative way of accumulating personal data during behavioural therapy. The web site will be developed using standard methods of software development. This thesis includes:

- The definition and later explanation of Trichotillomania
- In depth explanations on the current discovered symptoms and triggers
- Following a step-by-step procedure based on behavioural therapy
- Changes in a patient's life after going to therapy
- Seeing how notetaking as a tool for therapy can impact the patient's life
- Showing how the website provided functions

3. Literature Review

3.1 Definition

In the book Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, shortened as DSM-V, trichotillomania is categorised under the broader umbrella term Obsessive-compulsive and related disorders (OCD). (American Psychiatric Association et al ,2013)

3.1.1 comparison with Stereotypic movement disorder

To understand Trich. better DSM compares it to other similar disorders, one of them being Stereotypic movement disorder.

.The difference is that there is no obsession in stereotypic movement disorder, and the nature of the repetitive behaviour is different .Such as the fact that the repeated action becomes a rule and has a purpose in the case of Trich. and not in the case of stereotypic movement disorder.(American Psychiatric Association et al ,2013)

3.1.2 comparison with excoriation

Another comparison can be made with excoriation(skin-picking), in which the main difference lies in the period in which the symptoms first start: during childhood for excoriation and during puberty/young adult stage for trichotillomania. (American Psychiatric Association et al ,2013)

3.1.3 comparison with other obsessive-compulsive and related disorders

There is a big category of disorders called body-focused repetitive behaviour disorder. People in this category may also pull their hair but with a completely different intention than in trich. Those people might just be hating the way they look and be obsessed with altering their body. Others, again completely unrelated to trich.,are obsessed with symmetry ,which means they will remove only the hair that does not follow the same direction as the other hairs or the one that looks different than others. (American Psychiatric Association et al ,2013).I side-note for other illnesses that very rarely can have hair pulling is neurodevelopmental disorders ,in which people are plagued by tics. Another such disorder is psychotic disorder in which hair pulling is a response to a false belief (e.g. delusion/hallucination).

3.2 Characteristics

The first observed characteristic is the act of pulling out hair done by a person during the course of years with the frequency of every day. This behaviour will end with a

significant amount of hair loss. As a response to the bald spots on one's head ,this person will try to stop to no avail. In more serious cases ,with people that have a more sensitive skin ,the scalp may get irritated (reddish looking and itchy feeling).In this case the health care provider must be careful and do skin biopsy and dermoscopy ,to make sure that there is not a confusion between a dermatopathological diagnosis and a psychiatric diagnosis. Both of these diagnoses share some features such as decreased hair density , short vellus hair and broken hairs with different shaft lengths.[p.herman, 2004] One big red flag for a dermatologist will be that the damage cannot be rejuvenated in the case of Trich. no matter how many products were used.

3.2.1 Cause

The most prevalent cause of this disorder is a disruption in one's emotional state in a negative way(e.g. Anxiety and tension). Depending on a person's personality ,a cause can be much simpler ,such as boredom .

3.2.2 Post pulling

People have reported that that they feel some form of euphoria and/or relief when the act of pulling was finished. An interesting variation between patients is that some are not conscious of their hand movement and the act of pulling, until much later when they have the hair follicle in their hands, or they see it on a surface(e.g. the floor) close to themselves.Alternatively, some subjects have the opposite case in which they are hyperaware of what is going on and they know to expect at a higher level of consciousness that their feelings will change when the hair piece will leave them .Whether it is much better or worse ,again depends on the person, but the feeling is usually on the positive side.In more chronic cases there is a more robotic/automatic approach on the hair pulling, in which the person definitely knows what is going on, but the main focus is on other things.

3.3 Diagnostic

From a therapist's/doctor's perspective ,when approaching a person with the probability of having trichotillomania 5 points should be checked:

- 1.if the act of hair pulling happens all the time and ends with the person losing a chunk of their hair
- 2.the person already tried to stop but failed
- 3.the person really doesn't like pulling their hair, so this disorder gives them even more stress.in serious cases even affecting their social life and their life decisions (such as

attending an event ,because people might realise the hair on the floor which in turn might embarrass the patient

4.the person does not have a disease that causes hair loss(dermatological problems)

5.the person may hate their body in general. This is a different disorder called body dysmorphic disorder and it shouldn't be confused with trichotillomania.

A detail used for diagnosis ,worth mentioning is that ,biting hair is not considered a preface to trich. if there are no other symptoms .This observation is relevant due to the fact that many people jut like to play with their hair ,while this action being not a result of any psychological distress.A person can self-diagnose by referring to the YBOCS (Yale-Brown obsessive compulsive scale).Here you can find a brief description of this global severity scale(Fred Penzel et al, 2003) :

0.no illness

1.transient

The number of hairs is not sufficient to cause ant physical or emotional damage to the individual.

2.mild

The individual is fully aware of the problem and has control over it. He/she finds creative solutions to hide the lack of hair.

3.moderate

The urge to pull has started to increase and slowly affect a person social life(ex. Avoiding activities such as swimming that might show the loss of hair)

4.moderate to severe

At this stage the person will have strong and frequent urges that will test his/her ability to self-control. Hence this will lead to further social avoidance and self-deprecating thoughts.

5.severe

The frequency of hair-pulling episodes are seriously affecting the individuals life. This may include not being able to focus at work /school/personal project. The person will go out of their way to try to cover up the bald patches , but it will not work ,since the damage is too big.

6.extreme

The person has lost all control of the situation. Which led to halting of their professional and personal life. The person is at high risk of depression and other psychological disorder due to the copious distress and frustration brought by trich. Other tests of diagnosis that can be used are : NIMH (national institute of mental health – trichotillomania scales),Massachusetts general hospital hair-pulling scale, psychiatric institute trichotillomania scale (semi structured interview).Similarly, the book *The Hair-pulling Problem: A Complete Guide to Trichotillomania* by Fred Penzel (Fred Penzel et al, 2003) Has a very comprehensive checklist that can be used for multiple disorders. It is found in the part of the book titled Appendix A and sub-titled Trichotillomania/Skin picking/ Nail Biting Symptom Checklist.

Another method of diagnosis: Photograph measurement Another potentially useful objective measure of TTM severity and change following treatment is the use of photographs. These photographs are taken of patients' primary pulling sites, providing a concrete assessment of treatment success. It is often best to have the patients' photographs taken of the bald areas at pre treatment and post-treatment to assess for these concrete changes, although it is often the case that regrowth may not be evident.NIH-PA Author ManuscriptNIH-PA Author ManuscriptNIH-PA Author Manuscript until some months after pulling has ceased. In addition, the patient may use this to monitor maintenance and predict relapse. Such procedures have been used in previous adult and pediatric TTM studies . Photographs may be assessed using a Likert scale to provide for greater precision. In our studies, a 7-point Likert scale ranging from no evidence of alopecia to complete denudement of the area is implemented. Understandably, patients and possibly even parents may be reticent to permit such a photograph to be taken, and it is up to the clinician to exercise their judgment in determining whether the data would be especially helpful in informing treatment (<https://readingagency.org.uk>).

3.4 Body regions

Trich. can occur in different parts of the body .To list some of them would be scalp, eyebrows, eyelids, axillary(armpit) , facial, pubic and peri-rectal regions. A person can focus on only one site or multiple. This involuntary choice can change with time. People with trich. usually also end up having to deal with other psychiatric disorders such as skin-picking ,nail biting and lip chewing. In addition, some unexpected side-effects of Trich on the physical body are: digit purpura-red/purple discoloured spots , musculoskeletal injury (e.g. carpal tunnel syndrome-pain caused by a major nerve in the hand; back ,shoulder and neck pain),

blepharitis-inflammation of eyelids , and dental damage (e.g. worn or broken teeth due to hair biting) (American Psychiatric Association et al, 2013).

3.4.1 Duration

Hair pulling usually occurs in chunks of time called episodes. These episodes can be short lived (e.g. Half an hour) or spread out during the day /week/year. It should be stated that although most cases of trich. are chronic some people manage to stop and have it only once in their life. I would like to underline that this is very rare and people with trich. as a life-long problem are more common.(American Psychiatric Association et al, 2013)

3.4.2 Amount

Depending on which site the individual pulls the hair from ,the results will be more visible. To explain this better ,some people pull hairs from all over the scalp /body, so it takes more time for a visible emptiness to occur. The scientific term for baldness is alopecia. It usually is more stressful for people who pull hair from a specific point /area because it is also harder to hide that specific region plus this region may itch /tingle randomly during the day. (American Psychiatric Association et al, 2013).Some cope with this problem by trying to change their hair style in away that would hide the bald spot or use makeup (e.g. false eyelashes for when all of the eyelashes have been ripped, eyebrow pen for when eyebrows have been pulled), wigs, hats or scarves .A specific case of trich. is “tonsure trichotillomania” in which every part of the scalp is pulled except the margins(the places closer to the neck).(American Psychiatric Association et al, 2013).Initial steps for extracting hairs, most of the time approximately %65 of individuals, will just touches and brush their hair. (du Toit et al., 2001; Lochner et al., 2010). It just start by pulling out single hairs at the beginnig, naturally with the fingers although appliance like tweezers can also be used (Gary Alan-Hue Christenson et al., 1991;Thomas Brooke et al.,1991).It is shown that twisting hair until it falls out is less observable ,as is rubbing off the hair using their fingertips .A common goal of hair extraction is to remove the hair with its root still flawless aproximately, on the range of 31 – 52% of people explaining that it is really necessary pulling out hair with its root for the satisfaction (Imogen C Rehm et al., 2016)

3.4.3 Social implications

4. Along with all those tries at hiding comes a range of negative emotions such as the feeling that one cannot control own body anymore ,and more on social sense : shame and frustration emerging from being unable to explain to oneself or other people why control is lost. The situation gets worse if the person gives up on trying to lessen the symptoms of Trich. (American Psychiatric Association et al., 2013).Avoiding people by not going to work/school/social events with the explanation that their mind will always be on how to hide their condition .This feeling of shame can evolve into straight out lying to people about ones condition. An exception to this social isolation is usually the closest people to the patient such as the family or close friends. In rare cases the opposite occurs ,when the patient pays attention also to other people/animal/inanimate objects hairs by trying to pull their hair without them noticing.(American Psychiatric Association et al., 2013).Diefenbach managed a study to show the impact of hair pulling on psychosocial functioning for people recognised with TTM. Many analyzer showed that the outcomes showing that the results for TTM individuals having greater levels of distress when you relate with normal level experiments.All the obtained values featured are related with emotional features of hair pulling. Their experiments indicated that impairments in life satisfaction and functioning are directly related with hair pulling, however, al these obtained results were not easy to analyse with bringing to an agreement of existance of depression. Diefenbach showed that harshness of symptoms. Moreover, they have showed that, when you reach a normal level of depression, high level of hair loss impacts directly and importantly self-esteem. Generally, the studies showed that TTM and psychosocial impairment are connected with one another, however, one may show that the existence of depression possibly give an impact to the organization.(Melissa Marie Dixon et al., 2016)

3.4.4.Preference

Some people have specific details that they care about and look for during an episode. Those could be the texture of the pulled hair (e.g. curly /oily hair is more preferred since

it has a more tactile stimulus).For some people there is a satisfying notion in visually analysing the hair ,specifically looking for a bulbous root. More on tactile stimulus is achieved by playing with the hair in one's hand so see how much it stretches. In clinically dangerous cases the patient illness. First it starts with pulling the hair in between their teeth and ingesting it later. This phenomenon is called trichophagia in the literature. This may result in serious problems in the intestines since hair is not digested ,resulting in a blockage in a part of the organ (trichobezoars).During this process the patient is expected to feel abdominal pain , hematemesis (vomiting blood) , nausea, vomiting, bowel obstruction and even perforation(e.g. a hole in the stomach).(American Psychiatric Association et al., 2013)The first case of trichophagia was observed in France in the 18th century when a physician found a hair-ball in the body of a 16 year old kid.(Melissa Marie Dixon et al., 2016)

3.5 Statistics

Based on data acquired from the year of 2013 ,1 to 2 % of the population suffers from Trichotillomania. In terms of gender ,for every 10 females only 1 male is affected by this condition .This ratio is not seen in children indicating that the effect is due to the fact that males seek less help and that its culturally more acceptable for males to have baldness. Meaning the 70%female prevalence is an artificial data. This fact is a commonly seen problem in psychology that needs to be addressed by means of educating the mass populations and taking of the stigma around going to see a therapist. (American Psychiatric Association et al., 2013).Going back to the small number of males affected by trich., it is observed that those individuals usually choose to pull hair from their beard or moustache. Shaving is part of the advised solutions in this case.(Melissa Marie Dixon et al., 2016)

3.5.1 Age

As stated in the introduction of this document ,trich occurs mostly in adolescents but it has been seen in infants too. The difference is that in infants it is part of their development, hence it is not characterised as a disorder .The other difference being that infants do not continue with the hair pulling later in their life. For females that go through major bodily changes such as menstruation for the first time or perimenopause, the symptoms are worsened which coincides with the data collected around young adults.Between all these studies, the most important and serious of TTM was conjectured to be most conjectured by current age relative to age of onset, continuation of illness, type of pulling, altering earlier,

effect on the time being, and change after hair pulling.

When we consider previous studies, the results are different in some ways. One of them is regarding with huge number of participants for the studies for the present time. It studies how the following variables affect each other. One of the impressive part is about being first result, to be based on daily results and on many types of hair pulling. (Ali M. Mattu et al.,2012)

3.5.2.Heredity

Although there are not enough studies done on the aspect of heredity in trich, DSM tells us that people with relatives that have OCD have a higher chance of having Trich. In one of the first efforts to calculate the effect of heredity Drs.Susan Swedo found that out of 28 subjects with Trich. 5% had relatives that also had Trich. She states that the number of relatives with Trich drops to 1.5% for the control group. Due to limited number of participants this study was considered statistically insignificant .Another study with a larger number of contestants ,161, conducted by Dr. Gary Christensen ,has found a 3% correlation between the subject with Trich and their respective relatives that has Trich.(Fred Penzel et al., 2003)These studies were talked about in the book *The Hair-pulling Problem: A Complete Guide to Trichotillomania* published in 2003 ,which is less up to date than DSM-V which was published in 2013.Hence we will conclude that heredity may have an effect on trich.Scientist that study trich. using animals have found some interesting results .Scientists named Mario R. Capecchi and Joy M. Greer that work at Howard Hughes Medical Institute, were specifically focused on the gene *Hoxb8* on mice. Those animals are called “knockout mice ” in the literature.*Hoxb8* is linked to the making of a protein ,whose job is to have in its control a cluster of other genes.Findings include similar actions between mice and patients with trich.,such as grooming until bald spots/skin lacerations are formed.In addition, those mice would inflict the same harmful activity on their peers that were in the close vicinity.The original hypothesis is that the gene *Hoxb8* may be related with the region of the brain that deals with OCD. More so grooming may be kept in control by the central nervous system.As an advancement to this experiment ,human trials have begun ,in which mutations on the *Hoxb8* gene is been looked for in a patient’s genetic makeup. Results are impending on this matter. (Fred Penzel et al., 2003).

3.5.3 Culture

It seems like culture doesn’t affect Trichotillomania in any way ,but we have to take into account that most research was done in America and the continent of Europe.There has been

conducted an inventory ,the so called Beck Anxiety Inventory on college kids and a significant correlation has been found between anxiety and Trich.As the country of most studies ,researchers in America have decided to conduct a study on the matter of Trich on African American females. They have emphasised on the importance of such research ,since it is rarely done. It has been said that for the ethnicity of black woman in particular ,hair is a very important part of their culture ,which in turn gravely affects their psyche.From self-reports it has been concluded that hair may affect a woman's perception of own self-worth .The woman may put herself in a lower classification on the scale of stereotypically accepted attractiveness. There is a visible and at the molecular scale a difference in a white person's hair compared to a black person's hair. One difference is the struggle black people go through when they want to comb their hair after its washed. No such problems occur with Caucasian people's hair. To cope with this problem many people get aid from straightening irons which can cause long term damage to the hair. As with most human difficulties there will always be people benefitting from it financially ,such as hair salons ,which earn 15 billion dollars each year on average. With time people have got accustomed to changing their hair style to suit their lifestyle better. Some common activities surrounding hair are : hair braiding parties and being loyal to this one hairdresser which is visited at a routine ,or using very effective products such as Dixie Peach. No matter the ethnicity ,the areas from where hair is pulled is the same (such as the scalp mostly) . As a reason to differentiate black patients with Trich. from its white counterparts ,the claim that skin irritation having a role has been said but soon got disproven. Another researchers have also contributed to the conclusion that high levels of stress and anxiety were seen in students with an African American origin that also has Trich. This emotion has been detected especially before a lengthy hair-pulling episode. The researcher called Mansueto conducted the Beck Anxiety Inventory on the chosen students and have found a strong correlation .This condition (Trich.) is already not a popular research topic in the psychology field and it is even more rare for it to have a subgroup topic focused only on African Americans. Even though it is known fact that culture has profound affects on many psychological disorders, for the case of trichotillomania ,there are almost no reach done that gives culture credit also as a factor that affects trich. Data has been collected from African American students suggesting a high correlation between Trich and how much a person is anxious at the moment. Unfortunately, college students does not represent the whole population of African Americans, in this case

decreasing the validity and the power of extrapolation of the data. The study has a very narrow and specific group that it studies, which is female students that have reported having a high level of anxiety, being of African American origin and having Trich. Researchers were expecting to see a correlation between increase in anxiety and the symptoms of Trich. What researchers have found and predicted was that negative high cultural expectations on how one's hair should look was causing even more anxiety and hair pulling. (Angela Neal-Barnett, Deborah Statom, and Robert Stadulis et al., 2011)

3.5.4 Case Study

CYNTHIA: My life is in the hands of Trichotillomania. Most of my time is filled with the thought of how to hide. I am gravely distraught on an emotional level and this is what happens to anyone that I know that has Trichotillomania. Me not having hair is making me lose a lot of options in life. As a kid I was a swimmer. This activity was one of the biggest joys in my life. Now I don't swim anymore except when I go bald. I get even more stressed on days when it rains or the wind blows. The reason simply being that I don't have enough hair to hide the baldness especially if it is wet, and when it is windy the pieces of hair that protect me from the embarrassment of people seeing the baldness are flying around. I have chosen to do my absolute best as to not allow people to learn about my condition, even if it means not going to meet my friends or seeing them less. Trich has influenced my romantic life too, as in I have tried going to a date once and decided to not try again. I feel like in the eyes of the society I am lacking a part of my life if I don't have a significant other. Don't get me wrong I have no problem with the concept of dating, I'm simply scared. I attended university and one of the things that picked my interest were sorority dances. Unfortunately they required a dress, which is normally worn on its own, without a hat or anything covering the head. Do you see my problem here? I still maybe be that unique person but also maybe the weird and silly one so I opted out. This is such a small example of what this illness has stopped me from doing. I didn't know how much hair was important for a woman until I had this condition. Let me tell you it's nothing of a small matter. I despised the idea of anyone touching my scalp, such as in a massage salon. On a more serious note, I have to find a job but the prospect of being in a room with someone whose attention is on me and them thinking I have something wrong with my hair... this thought terrifies me and stops me from going to interviews. Some people would suggest to wear a baseball cap, which would look horrible on top of a suit, and I'm not here to start a fashion suicide. Another suggestion I keep hearing

is wearing a wig ,which I tried and found it looking even more unnatural than my bald spots. It's not only caring about other people's opinions anymore ;I am my own critic. It has affected me so much that I went from a sociable person to a weird ,lonely person. Mirrors are my enemies because that remind me of how much damage I have done to myself.I've cried enough for this illness. But nothing will change because I have given all control to Trichotillomania ,including anything from my actions ,interactions to my own thoughts about myself.**Susan's story:**Susan is a young adult at the age of 32 and a happy devoted mother of two.From the outside she looks like an extroverted ,always cheerful person ,that is easy to talk to.Her only problem in life is something whose name she didn't even know and simply called it "some stress related stuff" .Her history of Trichotillomania starts at the young age of 12 and the areas it encompasses are hair ,eyebrows and eyelashes. The severity of her condition was that she has lost all her eyelashes and had up to 5cm gaps in her scalp. She does not have any other psychological conditions. Obviously except the expected felling of shame ,decreased self-confidence and slight depression/sadness that come from lack of hair. The frequency of her pulling has not been constant, yet it never failed to show symptoms every day ,such as 1 hour pulling sessions. She tried professional help from dermatologists and therapy, yet they didn't decrease her symptoms. At her adult life Susan stumbled upon something called Trichotillomania and soon realised this is what she had been going through for all these years. Shortly after this revelation she reached out to professional pycgiatrists that are trained on the treatment of Trichotillomania. She started using medication given by the doctors despite her fears of experiencing any side effects. She considered later to combine pharmatherapy with behavioural therapy for better results. After much thought she decided to stop the intake of medication for now and focused only on behaviour therapy.

4 Practical part

4.1 types of therapy

These types of therapy were formed after careful evaluation of data collected from clinical cases of Trichotillomania. In terms of the amount of patients showing positive and successful results, behavioural therapy holds the first place among other types of interventions. Care should be personalized and centered individually, as one medication is not only successful in treating all those diagnosed with Trichotillomania. In the treatment of trichotillomania a number of therapeutic approaches and strategies are useful. Behavioral interventions have led to long-term, positive hair pulling improvements (Nelson et al., 1982). Some strategies that can be integrated in standard therapy methods or introduced as part of a formal behavioral modification plan are listed below. Nelson (1982) suggested that the clinician collect a sample before the treatments were introduced. At the beginning of the answer chain, any attempts to avoid hair pulling should be guided (i.e., before the person lifts a hand to pull hair; Taylor, 1963, as cited in Nelson, 1982). Consumer labeling claims that reinforce hair-pulling habits (e.g., pulling my hair helps me feel calmer; Yeh, Taylor, Thordarson, & Cocoran, 2003) can be beneficial for clients. The effects of hair pulling determine whether the action will continue or not (Stemberger et al., 2003). Customers may be asked to manage their own hair pulling (Deifenbach et al., 2000; Lerner, Franklin, Meadows, Hembree, & Foa, 1998). Self- allows clients to record their hair pulling urges, including the duration, length and situations in which the urges occur (Bordnick, 1997; Stein et al., 1999). It is reasonable to recommend that the client track the behavior-related emotions felt, as well as stimuli that affect hair pulling. Customers can be motivated to take reaction product measures; such as saving and counting pulled hairs (Deifenbach et al., 2000; Diefenbach et al., 2005) Recording hair pulling behavior through self-monitoring can add insight to hair pulling treatment (Deifenbach et al., 2005). Researchers recommended that clients mark hair pulling habits as compulsions, and recognize similar causes (i.e. being alone, reading, talking on the phone). Subsequently, attempts should be made to engage in conflicting activities or to concentrate on continuing to participate with existing habits (i.e. being with others, walking; Yeh et al., 2003). Competing reaction preparation teaches clients to behave in a manner inconsistent with hair pulling (Bordnick, 1997; Diefenbach et al., 2000; Enos & Plante, 2001; Lerner et

al., 1998; Twohig & Woods, 2004). For example, when a client feels the urge to pull or is asked to play with clay, he / she might be asked to make a fist for one-minute (Lerner et al., 1998; Twohig & Woods, 2004). One objective is to reverse the emphasis put on hair pulling, resulting in increased time spent on alternative behaviors and reduced time spent pulling hair (Yeh et al., 2003). Customers may b fists, place hair in a ponytail or participate in activities involving the use of their hands to avoid pulling (Mansueto et al., 1999; Rupp et al., 2000). It is advised to wear bandages on their fingertips, wear gloves, place weights on wrists, clench their Interruption of the response coupled with differential strengthening has been successful in eliminating hair pulling in the initial stages of removal of treatment (Rupp et al., 2000). interruption of response is a tactic employed to prevent attempts to participate in hair pulling behaviors (Holttium, Lubetsky, & Eastman, 1994; Rupp et al., 2000). Differential reinforcement is used as a method for the Volume 2, No. 1, Winter 2006 69 International Journal of Behavioral and Consulting Therapy. Increase consumer interaction with alternative activities or lack of behaviour (Rupp et al., 2000). The client can be guided to use his / her hands more properly (Holttium et al., 1994). The justification for the above mentioned strategies is seen in the notion that hair pulling behavior has been improved, so alternatives to pulling should be improved as well (Rupp et al., 2000; Stemberger et al., 2003). Elliott and Fuqua (2000) suggested that punishment is effective in decreasing behaviors associated with Trichotillomania. Some examples of successful punishment techniques are electric shock, topical agents that produce pain and snapping a rubber band. The authors emphasized that punishment is especially helpful in treating individuals with developmental disabilities. Another behavioral approach is the implementation of relaxation training culminating in reduced stress that indirectly reduces the urge to pull hair (Lerner et al., 1998). Strategies can be used to minimize situations where hair pulling is optimal and to improve conditions that render hair pulling challenging (Stemberger et al., 2003). Elliott and Fuqua (2000) indicated retribution may be successful in reducing trichotillomania-related behaviours. Several examples of effective methods of retribution include electric shock, chemical chemicals that inflict discomfort and break a rubber band. The writers emphasized that discipline is especially effective when it comes to handling individuals with intellectual disabilities. Another behavioural strategy is relaxation

therapy that culminates in decreased discomfort that implicitly eliminates the desire to grab hair (Lerner et al., 1998). This also provided innovative solutions to applying clinical management techniques. Behavioral therapies can be done by mobile or social environment. Telephone mediated occupational counseling has proven an important method for trichotillomania diagnosis (Yeh et al., 2003). Community counseling has been shown to improve understanding of the internal and external signals of clients involved with the desire to pull their hair, disrupt the hair pulling chain, and incorporate alternate therapeutic approaches to their impulses (Diefenbach et al., 2000; Stein et al., 1999). Many aspects require changes, generalization and consumer control. Giving clients the ability to discuss care choices will help to inspire and encourage clients (Mansueto et al., 1999). Trichotillomania is an growing phenomenon of the behavioral and emotional condition. Clinicians have a duty to help patients who are dealing with the disease successfully. Behavioral approaches have been found to be successful strategies to be implemented and are deserving of concern when designing recovery programs. (Dillenburg, K., Akhonzada, R. and Fargas, M. et al., 2006)

Trichotillomania Pharmacotherapy :Early interpretations of TTM as a potential OCD subtype contributed to the first controlled review of the effectiveness of the hair pulling treatment drug. Since OCD patients react to serotonin reuptake inhibitors (SRIs) such as clomipramine more robustly than to noradrenaline reuptake inhibitors such as desipramine, the effectiveness of clomipramine was contrasted with that of desipramine. Clomipramine in the research was shown to be slightly more successful than desipramine in hair pulling patients (Swedo et al., 1989), That not only presented novel therapeutic strategies for people with this condition, but also produced some data to support the theory that trichotillomania lies on a continuum of OCD-related disorders. A newer class of antidepressant drugs, the selective serotonin reuptake inhibitors (SSRIs), have been found to be better absorbed than clomipramine and one of these compounds has also been proven to be more successful than placebo in treating OCDs. Nevertheless, the evidence in TTM for the efficacy of such agents is less persuasive. Consequently, the usage of drugs in TTM care requires a more thorough review than would be appropriate if it were more comparable to OCD therapy. Uncontrolled trials have indicated that SSRIs such as fluoxetine, fluvoxamine, and citalopram are effective in the treatment of TTM; approved tests have also demonstrated effectiveness for fluoxetine (Piggott, L'Heueux, & Grady et al., 1992) and venlafaxine, a serotonin and reuptake

transporter for noradrenaline (Ninan et al., 1998). A variety of placebo-controlled SSRI studies were unfavorable though (O'Sullivan, Christenson, & Stein et al., 1999). In fact, research investigating the persistence of improvements in patients undergoing SSRIs have observed disease regression and in patients seeking pharmacotherapy for stabilization (Pollard et al., 1991; Benaroché, 1991). Deceptive outcomes of TTM SSRI care have culminated in efforts to utilize certain forms of drug, including as monotherapy or as a means to improve markers of serotonin reuptake. Dopamine antagonists are considered to be effective in the Tourette disease and seen as an improvement.

Management of Trichotillomania : Quick Diagnosis and Crisis Action /3:3 Autumn 2003 341

OCD refractory care personnel. Indeed, other evidence indicate that such agents play a function in the TTM pharmacotherapy (Stein & Hollander et al., 1992; Van Ameringen & Mancini et al., 1996). New generation antipsychotics like risperidone and ziprasidone offer a greater tolerability and protection profile than older versions like haloperidol do. Nonetheless, vigilance is required, because such drugs can have serious adverse effects, and placebo-controlled studies demonstrating TTM efficacy have not been performed. A variety of other drugs have also been tested for TTM as possible pharmacotherapy candidates: naltrexone, an opioid antagonist; lithium, a cognitive stabiliser; and carbohydrate inositol. However, clarity regarding the advantages of such agents is restricted due to methodological shortcomings, such as low sample size and inadequate controls. Those agents can not, however, currently be approved for daily clinical use. Indeed, since behavioral treatment is sometimes successful in managing TTM, it may be treated as the first-line strategy. Despite these restrictions, for certain hair pullers, pharmacotherapy may play an important role, particularly where there are comorbid mood and anxiety disorders. Given that this comorbidity is too widespread and that other mood and anxiety conditions react to SSRIs, the usage of such agents tends to be appropriate for managing patients with these characteristics. Dosage and period recommendations have also been drawn when dealing with OCD (i.e. fairly large dosage over lengthy therapy intervals), but certain people are known to react to lower levels of SRI than is anticipated in OCD cases (O'Sullivan et al., 1999). Certain agents may be helpful to patients with different comorbidity trends. Because of the growing data that both therapeutic intervention and pharmacotherapy are effective with TTM care, more physicians are likely to prescribe integrated counseling that incorporates all therapies. Additionally, some research shows that individuals with TTM

gain advantages from integrated therapies that include pharmacotherapy as well as other clinical and cognitive behavioural modalities in naturalistic environments (Keuthen et al., 1998). However, further work is needed to specifically confirm the efficacy of pharmacotherapy in naturalistic settings where TTM comorbidity might be common. Another area where additional work is required is research on the optimal sequencing and combination of psychotherapy and pharmacotherapy. (Ruth M. T. Stemberger, PhD Dan J. Stein, MD, PhD Charles S. Mansueto, PhD et al., 2014) Research on chronic hair pulling has shown that habit reversal (HR) is among the most effective self-management treatments for young adults (Friman, Finney, & Christophersen et al., 1984). There are few records of effective HR hair pulling care in teenagers, however. Because of the lack of studies on HR hair pulling care in teenagers and the possibility that children in this age range might have special difficulties in effectively pursuing self-management therapies such as HR, additional work in this field seems to be warranted. This research aimed to test a condensed form of HR with 3 hair pullers aged 12 years. Just three components of the HR kit – sensitivity preparation, competitive reaction instruction, and social reinforcement – were tested based on studies that demonstrated the efficacy of these components in addressing certain developmental disabilities (Woods & Miltenberger et al., 1996). Mailing address to Raymond G. Miltenberger, Psychology School, North Dakota State University, Fargo, North Dakota 58105. METHOD: System Participants Andy, Eddie and Katy, every 12 years old, having been active in hair pulling for a span of about 14 months (Andy and Katy) and 9 years (Eddie). Andy and Eddie were identified with attention deficit hyperactivity disorder and depression was treated with Katy. Andy removed hair off his forehead, neck and eyelashes. Both Eddie and Katy's hair pulling caused visible hair loss only to the scalp. Interviews with parents showed that Andy and Katy primarily pulled hair when he or she was alone, but Eddie still participated in actions in certain situations (e.g., house, college, baseball matches). Goal Behaviour and Data Collection Hair pulling was described as all 3 participants pressing their fingers to the scalp, eyebrow, or eyelashes. A camcorder was used to collect data when the participant was alone or talking to a parent (Eddie) in the participant's house. Videotaped studies took place both throughout the afternoon and in the evening and fixed the amount of 10-minute sessions 300 JOHN T. RAPP et al. completed during each study (range, 3 to 12 sessions); Through 10-minute session was rated to generate a percentage amount of hair pulling for incidence or non-occurrence of hair

pulling on a second-by-second basis. Two raters rated 30 per cent of videotaped test sessions separately utilizing the same second-by-second monitoring process. For each of the 600 s of assessment in a session, the percentage of consensus on the frequency and non-occurrence of the behaviour was determined. Mean consensus was 99 percent with Andy, Eddie and Katy's hair picking. Indirect hair regrowth measurement was done using Andy camcorder and Katy 35 mm video. The absence of Eddie's hair was not visible by visual or photographic examination. Four doctoral students in clinical psychology (independent of the authors) and three professors observed images and videos from the baseline and care periods and then performed a four-part assessment to determine the psychological significance of the care result. -- object was scored on a scale from 1 (not at all) to 7 (extremely) (e.g., ' ' How normal does this person's hair look to you? '). You can get the questionnaire from the second page.

Procedure To test simple pattern reversal (SHR), which consisted of perception testing, competing reaction preparation, and social reinforcement, we used a non-competitive multiple model through groups. During sensitivity training, the pupil was trained to identify any hair pulling instance by explaining what hair between his or her fingers looked like and then continuously simulating the action without actually pulling hair out. A researcher exerted physical resistance to the participant's neck, while hair pulling was performed 8-10 times to accentuate the participant's hair pulling muscles. With opposing training on reaction, The researcher helped pick three or four habits that were associated with hair pulling, and was then advised or participate in one of those habits (e.g. folding arms, sitting on hands) if a hair pull or pull impulse was observed. The child demonstrated hair pulling during the training and participated in a competing answer for 1 min. It has been replicated 12-15 times. In order to social reinforcement, we advised parents to allow their child to use a competing answer where appropriate, to give praise (e.g., ' ' Good job to sit on your hands ') for using a competing answer in the habit-prone case, and to give praise For the lack of hair pulling and for clear hair regrowth (e.g. "Your hair is looking fine"). Specific 30-min booster sessions with the individual and parents were performed to evaluate the SHR components when an elevation was observed in the results. For Katy, the booster sessions were introduced when she regularly recorded difficulty utilizing a competing answer. We adjusted the booster exercises to solve her issues.

RESULTS AND DISCUSSION :Important hair pulling declines were observed during the analysis for all 3 participants (see Figure 1); however, the amount of booster sessions needed to sustain such declines differed.

(john t. rapp et al., 1998).

4.2 The code

4.2.1 Thesis html part explanation

Starting from the general parts of my code ,we have the headers shown as h1,h2.. And the paragraphs as the p tag. As for css the paragraphs are changed to have the colour blue ,the font size 20px and the width 200px.One difference for header2 is that it is aligned to the centre of the screen by using the property text-align and the value centre. I showed my class selectors by putting a dot in front ,e.g. .highlight,similarly putting a # made the selectors a id selector (e.g. #mainPoint) . .When using a class I have to make changes in the html ,such as adding class="highlight" for that portion of the code to follow the styling of the class highlight.highlight being the attribute.Also there should be no spacing between the dot and the name of the class.Another type of class used is id which requires a pound sign before the name of the id and can only be used for non-repeating, specific parts of the html document. While using this id the pound sign is omitted.multiple selectors can have the same appearance by us putting them together with a comma in between. As an example, p, h1{colour: blue}.I tried to use calming combinations of colours, so it is an enjoyable experience for the user. Such as the hexadecimal value #fffdd0 for the body, which represents the colour cream.For finding a specific font I wanted, I visited the page www.google.com/fonts and searched for oxygen. Then I choose the light, regular and bold sizes. It's important to also realise that some fonts make the website load slower. I made sure this is not the case. I copied the link and the way I should write it in CSS. The font I chose is called oxygen and I think it adds a fresh look to the website.

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>Simple Selectors</title>
<style>
/* all h2 elements */
h2 {
  color: red;
  text-align: center;
```

```
}
/* all with class="highlight" */
.highlight {
  font-size: 20px;
  font-weight: bold;
  font-style: italic;
  background-color: green;
  opacity: .6;
}

/* element with id="mainPoint" */
#mainPoint {
  font-size: 24px;
  font-weight: bold;
  background-color: red;
  opacity: .7;
}

/* all p AND h1 elements */
p,h1 {
  color: blue;
  text-align: center;
}
body {
  font-size: 16px;
  color: #fff;
  background-color: #ffdd0;
  font-family: 'Oxygen', sans-serif;
}

</style>
</head>
```



```
<body>
```

```
<h1>trichotillomania</h1>
```

```
<h2>introduction</h2>
```

```
<p class="highlight">As the humankind evolved to form complex societies, people's lives have also changed drastically. One of the inevitable consequences of a packed working schedule of a city life is that people get stressed and may form various habits to try to cope with this phenomenon. Some coping strategies are widely known and used such as meditation and exercises on strengthening mental health.</p>
```

```
<p class="highlight">"You're braver than you believe, and stronger than you seem, and smarter than you think." A.A. Mine</p>
```

```
<h2>definition</h2>
```

```
<p>In the book Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, shortened as DSM-V, trichotillomania is categorised under the broader umbrella term Obsessive-compulsive and related disorders (OCD).</p>
```

```
<div>conclusion
```

```
<span id="mainPoint">Trichotillomania is an growing phenomenon of the behavioral and emotional condition. Clinicians have a duty to help patients who are dealing with the disease successfully. Behavioral approaches have been found to be successful strategies to be implemented and are deserving of concern when designing recovery programs.</span>
```

```
</div>
```

```
</body>
```

```
</html>
```

```
<?php
```

```
//          Database          connectivity          Starts
$servername          =          "localhost";
$username            =          "root";
$password            =          "";
$dbname              =          "freelancer_symptoms";
//      DataBase      Connectivity      With      the      Web      page
```

```

$conn = new mysqli($servername, $username, $password, $dbname);
// database connectivity ends
// This code runs when some one click on submit button
if(isset($_POST['Submit']))
{
    $value = $_POST['value'];
    $dated = $_POST['dated'];
    // This code is for data insertion in the database
    $sql = "INSERT INTO tbl_record_symptoms (value , dated)
VALUES ('$value', '$dated')";
    if ($conn->query($sql) === TRUE) {
        // echo "New record created successfully";
    }
}
?>

```

```

<!DOCTYPE html>
<html>
<head>
<title>Record Symptoms Of An Illness</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<!-- This is the bootstrap stylesheet link for styling the webpage -->
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
</head>
<body>
<!-- This is the javascript code for plus button and minus button -->
<script language=javascript>
function process(v){
    var value = parseInt(document.getElementById('v').value);
    value+=v;
    document.getElementById('v').value = value;

```

```

}
</script>
<center>
<h1>Record Symptoms Of An Illness</h1>
<p class="text-danger">*****Please Submit the Today Symptoms Before The
Day Passed*****</p>
<form class="form-horizontal" method="post">
<button type="button" value="" onclick="javascript:process(-1)" class="btn btn-
danger"><i class="glyphicon glyphicon-minus-sign"></i></button>
<input type="number" size="10" id="v" name='value' value='0' class="form-
control" style="width: 10%;display: inline-block;height: 35px;">
<input type="hidden" name="dated" value="<?php echo date('Y-m-d'); ?>">
<button type="button" value="+" onclick="javascript:process(1)" class="btn btn-
success"><i class="glyphicon glyphicon-plus-sign"></i></button><br>
<input type="submit" name="Submit" value="Submit" class="btn btn-primary"
style="margin-top: 4px;width: 10%;font-weight: bold;" />
</form>
<div id="chartContainer" style="height: 300px; width: 100%;margin-top:
50px"></div>
<!-- This is the graph library to show symptoms on a graph -->
<script src="https://canvasjs.com/assets/script/jquery-1.11.1.min.js"></script>
<script src="https://canvasjs.com/assets/script/jquery.canvasjs.min.js"></script>
<?php
// fetching data from the database
$one = date('Y-m-d', strtotime("-7 day"));
$sql_one = "SELECT * FROM tbl_record_symptoms WHERE dated = '$one'
ORDER BY id DESC";
$result_one = mysqli_query($conn, $sql_one);
$row_one = mysqli_fetch_assoc($result_one);
if($row_one)
$count_one = $row_one['value'];
else

```

```

$count_one = 0;
$two = date('Y-m-d', strtotime("-6 day"));
$sql_two = "SELECT * FROM tbl_record_symptoms WHERE dated = '$two'
ORDER BY id DESC";
$result_two = mysqli_query($conn, $sql_two);
$row_two = mysqli_fetch_assoc($result_two);
if($row_two)
    $count_two = $row_two['value'];
else
    $count_two = 0;
$three = date('Y-m-d', strtotime("-5 day"));
$sql_three = "SELECT * FROM tbl_record_symptoms WHERE dated = '$three'
ORDER BY id DESC";
$result_three = mysqli_query($conn, $sql_three);
$row_three = mysqli_fetch_assoc($result_three);
if($row_three)
    $count_three = $row_three['value'];
else
    $count_three = 0;
$four = date('Y-m-d', strtotime("-4 day"));
$sql_four = "SELECT * FROM tbl_record_symptoms WHERE dated = '$four'
ORDER BY id DESC";
$result_four = mysqli_query($conn, $sql_four);
$row_four = mysqli_fetch_assoc($result_four);
// print_r($row_four);
if($row_four)
    $count_four = $row_four['value'];
else
    $count_four = 0;
$five = date('Y-m-d', strtotime("-3 day"));
$sql_five = "SELECT * FROM tbl_record_symptoms WHERE dated = '$five'
ORDER BY id DESC";

```

```

$result_five = mysqli_query($conn, $sql_five);
$row_five = mysqli_fetch_assoc($result_five);
if($row_five)
    $count_five = $row_five['value'];
else
    $count_five = 0;
$six = date('Y-m-d', strtotime('-2 day'));
$sql_six = "SELECT * FROM tbl_record_symptoms WHERE dated = '$six' ORDER
BY id DESC";
$result_six = mysqli_query($conn, $sql_six);
$row_six = mysqli_fetch_assoc($result_six);
if($row_six)
    $count_six = $row_six['value'];
else
    $count_six = 0;
$seven = date('Y-m-d', strtotime('-1 day'));
$sql_seven = "SELECT * FROM tbl_record_symptoms WHERE dated = '$seven'
ORDER BY id DESC";
$result_seven = mysqli_query($conn, $sql_seven);
$row_seven = mysqli_fetch_assoc($result_seven);
if($row_seven)
    $count_seven = $row_seven['value'];
else
    $count_seven = 0;
$eight = date('Y-m-d');
$sql_eight = "SELECT * FROM tbl_record_symptoms WHERE dated = '$eight'
ORDER BY id DESC";
$result_eight = mysqli_query($conn, $sql_eight);
$row_eight = mysqli_fetch_assoc($result_eight);
if($row_eight)
    $count_eight = $row_eight['value'];
else

```

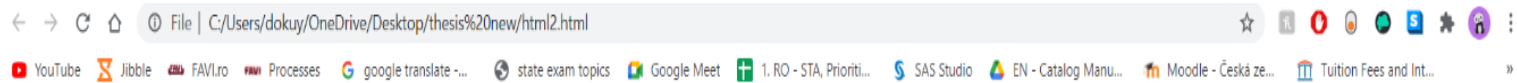
```

$count_eight = 0;
// print_r($one);exit();
?>
<script type="text/javascript">
// Graph Code starts
window.onload = function () {
var options = {
title: {
text: "Record Symptoms Of An Illness In Chart"
},
data: [{
type: "column",
yValueFormatString: "#,###",
indexLabel: "{y}",
color: "#546BC1",
dataPoints: [
{ label: '<?php echo $one ?>', y: <?php echo $count_one ?> },
{ label: '<?php echo $two ?>', y: <?php echo $count_two ?> },
{ label: '<?php echo $three ?>', y: <?php echo $count_three ?> },
{ label: '<?php echo $four ?>', y: <?php echo $count_four ?> },
{ label: '<?php echo $five ?>', y: <?php echo $count_five ?> },
{ label: '<?php echo $six ?>', y: <?php echo $count_six ?> },
{ label: '<?php echo $seven ?>', y: <?php echo $count_seven ?> },
{ label: '<?php echo $eight ?>', y: <?php echo $count_eight ?> }
]
}]
};
$("#chartContainer").CanvasJSChart(options);
}

```

```
//          Graph          code          ends
</script>
</center>
</body>
</html>
```

4.2.2 Website fig1



trichotillomania

introduction

As the humankind evolved to form complex societies, people's lives have also changed drastically. One of the inevitable consequences of a packed working schedule of a city life is that people get stressed and may form various habits to try to cope with this phenomenon. Some coping strategies are widely known and used such as meditation and exercises on strengthening mental health.

"You're braver than you believe, and stronger than you seem, and smarter than you think." A.A. Mine

definition

In the book Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, shortened as DSM-V, trichotillomania is categorised under the broader umbrella term Obsessive-compulsive and related disorders (OCD).

conclusion Trichotillomania is an growing phenomenon of the behavioral and emotional condition. Clinicians have a duty to help patients who are dealing with the disease successfully. Behavioral approaches have been found to be successful strategies to be implemented and are deserving of concern when designing recovery programs.

Record symptoms of trichotillomania

*****Please Submit Today Symptoms Before The Day Passed*****

Record symptoms of trichotillomania In Chart

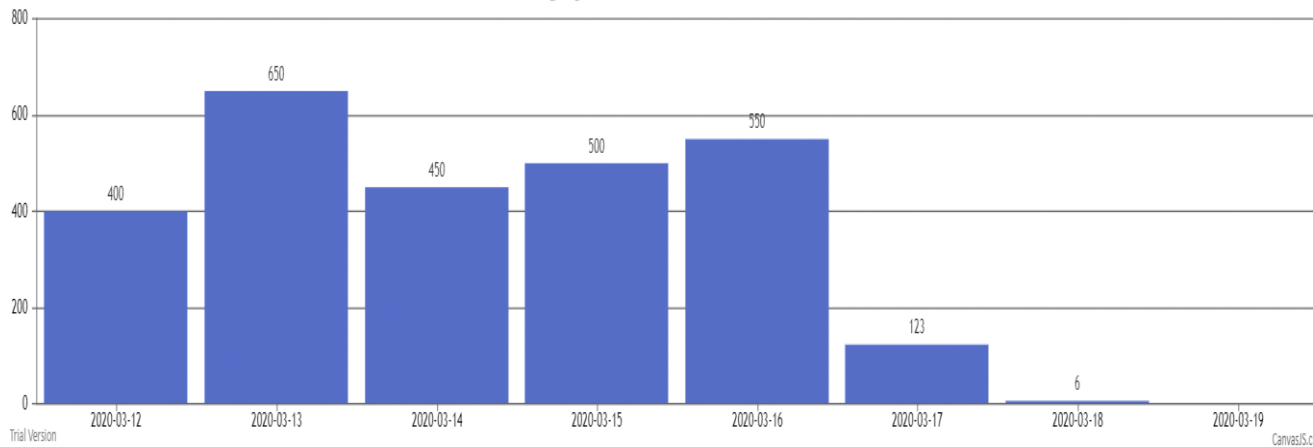


Fig2

5. Results and Discussion

Like in any human challenges, people will still benefit financially from it, such as beauty salons, which raise an average of \$15 billion annually. With time people got used to changing their hair look to best suit their lifestyle. Many famous hair-related practices are: hair braiding parties and staying faithful to this one hairdresser visited on a schedule, or using highly successful brands like Dixie Peach. Regardless of race, the regions from which hair is removed are the same (like mainly the scalp). As a rationale to distinguish Trich from black patients. Record symptoms are collected by the website helps to find more efficient way for the treatment and to choose the most suitable drug. A variety of other drugs have also been tested for TTM as possible pharmacotherapy candidates: naltrexone, an opioid antagonist; lithium, a cognitive stabiliser; and carbohydrate inositol. However, clarity regarding the advantages of such agents is restricted due to methodological shortcomings, such as low sample size and inadequate controls. Those agents can not, however, currently

be approved for daily clinical use. Indeed, since behavioral treatment is sometimes successful in managing TTM, it may be treated as the first-line strategy.

6. Conclusion

Trichotillomania is an growing phenomenon of the behavioral and emotional condition. Clinicians have a duty to help patients who are dealing with the disease successfully. Behavioral approaches have been found to be successful strategies to be implemented and are deserving of concern when designing recovery programs. The last decade has seen significant changes in the volume of data we regularly produce and process, as well as our capacity to use technologies to interpret and appreciate it, in almost everything we do. The convergence of these patterns is what we call "Big Data" and it allows companies in every sector to become more effective and competitive. It's no different from healthcare. In addition to increasing revenues and eliminating unnecessary costs, Big Data is being used in hospitals to forecast epidemics, eradicate illness, improve quality of life and reduce preventable deaths. As the world's population rising and people living longer, care distribution mechanisms are evolving quickly and data inform many of the decisions behind those changes.

7. References

(1) Perspectives on Genetics Among Individuals with Trichotillomania by Nassereddine, Lamees

(2) DSM -V

(3)displus.sk

(4) The Hair-pulling Problem: A Complete Guide to Trichotillomania by Fred Penzel

(5)readingagency.org.uk

(change to5)Trichotillomania: a journey of personal empowerment: a qualitative study of woman who engage in chronic hair pulling by Melissa Marie Dixon

(5) Trichotillomania and its treatment: a review and recommendations by Martin E Franklin, Kathryn Zgrabbe, and Kristin L Benavides-2011

(6) Trichotillomania by Gary Alan-Hue Christenson and Thomas Brooke ,1991

(7) Development of a Measure of Cognitions and Beliefs in Trichotillomania by Imogen C Rehm, 2016

(8) TRICHOTILLOMANIA: A JOURNEY OF PERSONAL EMPOWERMENT
A QUALITATIVE STUDY OF WOMEN WHO

ENGAGE IN CHRONIC HAIR PULLING by Melissa Marie Dixon, 2016

(9) The Development, Affect Regulation, and Style of Pulling of Trichotillomania by Ali M. Mattu, 2012

(10) Trichotillomania Symptoms in African American Women: Are they Related to Anxiety and Culture? By Angela Neal-Barnett, Deborah Statom, and Robert Stadulis, 2011

(11) Nelson, 1982

(12) Stemberger et al., 2003

8. Appendix