

OUTBOUND

YOUTH WORK

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**PROJECT RESULT 1: RESEARCH
PHASE**

INTRODUCTION OF THE PROJECT

According to the United Nations (2020), 56.3% of the global population live in urban areas. Urbanization affects mental health through the influence of increased stressors and factors such as overcrowded and polluted environment, high levels of violence, and reduced social support. The range of disorders associated with urbanization is enormous and includes psychoses, depression, alcoholism, crime, delinquency, family disintegration, and alienation (Trivedi, Sareen, & Dhyani, 2008) Youth are one of the groups in society that are more prone to suffer from mental health problems due to urbanization and this detachment from nature (Hill, 2007). Statistics by the World Health Organization (2020), state that:

- mental health conditions account for 16% of the global burden of disease and injury in people aged 13–19 years,
- half of all mental health conditions start by 14 years of age but most cases are undetected and untreated,
- globally, depression is one of the leading causes of illness and disability among adolescents,
- suicide is the fourth leading cause of death in 15–19-year-olds.

Seeing this rise in cases of mental health issues and observing how wilderness therapy can help tackle this, we decided to embark on a project that aims to make use of wilderness therapy to provide youth an alternative strategy to improve their mental health conditions leading to their holistic well-being.

In this publication, we will be presenting more in-depth research on:

- Attention Deficit Hyperactivity Disorder (ADHD)
- Addiction and Substance use Disorder
- Anxiety
- Depression
- Obsessive Compulsive Disorder (OCD).
- Self-Harm and Suicide in youth

These are the 6 most prevailing mental health conditions in the countries of the partner organisations. Each research has more information on each condition on how it affects the people, what are the symptoms, what can be the causes and the triggers, how does it make the person feel and other vital information. The idea of this research is to help youth workers and people working with youth to get more familiar with these conditions and how they affect our youth.



PARTNER INFORMATION

PRISMS MALTA

Prisms is a group of experienced youth workers that in 2008 came together with the aim of creating an NGO that caters for the requirements of young people and those working with young people. Prisms aims to empower people with the skills, tools, information and values necessary for personal growth and to be active participants within society. Prisms provides to the necessities of the people it works with through innovative non-formal methods of education so as to reach their needs in a holistic manner.

Prisms focuses on coaching and mentoring, online tools, mental wellbeing, inclusion and disability through the following objectives:

Young people

- Context out: Prisms strives to connect with young people in their environment. Our youth workers reach out to the young people to understand their living situation, at which point they are in their lives and their key relationships with others,
- Needs-analysis: At the basis of all of our activities lies a person-centred approach that enables us to connect with a purpose. Prisms listens to the young people and their life experiences and together with the young person they identify the needs to be addressed,
- Empower: Prisms believes that every person has potential and through a positive relationship with the young person, it challenges them to set achievable goals for their growth

Youth workers

- Prisms focuses on both the personal and professional development of youth workers. We believe that the general wellbeing of the youth worker is pivotal as they serve as role-models for young people. Developing their intra and inter personal skills enables the youth worker to engage better with the young people they work with. Prisms provides tools to the youth workers to be more self-reflective and identify areas for growth,
- Linked with the above, on a professional level, Prisms offers innovative tools and methods on how the youth workers can reach, connect, engage and empower young people

Target groups

Prisms has two main target groups;

- Young people aged between 13 and 35 years old
- Youth workers, youth leaders and other professionals that work with young people. There is no particular age range for this target group

Geographical reach and main activities

Our activities are carried out both at a national and European level. We work with both young people and also youth workers both local and foreigner.



We deliver workshops, seminars and training courses. Through the years, Prisms has developed its expertise in online youth work and online tools that provide the opportunity to the youth workers to engage with young people both online and offline. Additionally, we are currently providing training to educators in Malta as part of their Community of Professional Educators' sessions (CoPE). The training is provided on anger management, integration of online characteristics in an online environment and intercultural communication.

The successful implementation of our initiatives is also attributable to the fact that Prisms has always sought to create meaningful collaborations and we have thus created national partnerships with a number of partners both local and international. This ensures that our initiatives are of good quality and that they offer space for youth workers and young people to build their own and their organization capacity whilst also offering good quality youth work practices. These partnerships offer the possibility of exchanges of best practices.



Prisms has been implementing projects and organizing training courses on a national and European Level since its setting-up. We invest a lot of time and effort to promote youth work and non-formal education in innovative ways. Indeed, our organisation believes that we should be where the young people are and we should not base our activities on the belief that young people will come to us but rather we should go them. For this reason all our activities and projects are based on an in-depth needs analysis and are built by, with and for the young people. As important is the fact that we believe that youth workers and those working with young people should make use of online youth work practices so as to be closer to the young people and to engage better with them. Indeed, we are engaged in a number of projects that provide more quality youth work through online services.

RICHMOND FOUNDATION MALTA

Richmond Foundation was founded on 13th May 1993 and is a non-governmental, non-profit making organisation working in the field of mental health and the only one of its kind in Malta. Richmond Foundation provides community services for persons with mental health difficulties, is involved in the promotion of mental health and the prevention of mental illness amongst the general public.

Services offered by the Foundation include: a rehabilitation facility, a programme for children with challenging behaviour, male and female hostels, a female group home, a Supportive Housing Scheme, a Home Support Service, a Staff and Organisation Support Programme, a Psychological Support Service and a Training and Development Unit. The Foundation has also taken on various initiatives such as Self-Help Groups, research and training. All of the programmes and help that Richmond Foundation gives, is centered around the belief that we would like to see people overcome their mental health issue so that they can continue living their life.

As an organization, we believe that a big percentage that comes with mental health problems, comes from the fact that there is a lot of stigma surrounding people suffering from mental health issues. In fact, Richmond Foundation, strives to combat stigma and increase awareness on the subject through the local media and also through the various activities that it carries out on a regular basis within the community. The Foundation actively participates in regional and international events where it has the opportunity to increase its knowledge, expand its network, shares its views and heightens its profile and reputation.

Richmond Foundation is registered with the Commissioner for Voluntary Organisations (VO/0017) in terms of article 3 of the Voluntary Organisations Act, 2007 and Operates a Quality Management System which complies with the requirements of SM EN ISO 9001 : 2015.

PÄRNU YOUTH RECREATION CENTRE ESTONIA

Pärnu Youth Recreation Centre first opened its doors in the summer of 2008. Since then, we have made it their mission to support young people in their lives and personal growth by creating a safe space for them to be heard without any preconception or judgement and providing them with tools to show initiative, be creative and improve their social skills.

In November 2013 Pärnu Youth Recreation Centre joined the Association of Estonian Open Youth Centres which is a guardianship organisation to almost 200 different youth centres in Estonia. Through this collaboration Pärnu Youth Recreation Centre has hosted several large-scale projects aimed primarily at NEET youngsters or at-risk children. Thank to this collaboration our youth workers have also gained a lot of knowledge through the experience sharing through seminars and trainings that we had with fellow Estonian youth workers.

In 2018 Pärnu Youth Recreation Centres started to operate Audru Youth Centres that are located in Pärnu. These two youth centres were the first ones to start developing mobile street-based (detached youth work) in Pärnu City. In three years, this has proved to be a very successful initiative and a very effective method in reaching vulnerable young people and reducing crime in Pärnu City.

The youth work done by our organisation was recognized on a national level in 2019. In fact, in 2019 Pärnu Youth Recreation Centre was named the best youth centre in Estonia by The Ministry of Education and Research. Honored by this recognition Pärnu Youth Recreation center became more motivated than ever to keep up with good quality work with young people.

Within our two-youth center we have a total of 8 full time youth workers working with us and also 2 youth workers working on a part time basis. Together they are working with around 200 young people which makes about 70% of the total amount of young people of our city. Our aim is that in the near future we increase that percentage even more so as to reach more young people with our work.

IASIS GREECE

IASIS is non-governmental, non-profit organization active in the field of Social Inclusion, Mental Health and De-institutionalization, which actively participates in the psychiatric reform promoted by the Ministry of Health and Social Solidarity and the European Union. IASIS has an official registration as Private Non-Profit Organization. The organization's main objective is to provide psychosocial support and education to people who either belong into the range of or are at risk of exclusion and to adult professionals in the humanitarian field.

IASIS began its preparatory actions in 2005. The first housing structure, a boarding house for 15 people with mental disabilities, started to operate in 2006 and a 2nd boarding house with another 15 people started to operate in 2018. In 2008, IASIS NGO's activities in the field of de-institutionalization were extended with a Day Centre for people with psychosocial problems (80 people each year), and 2 Sheltered Apartments hosting 4 tenants each with mental health issues. The organizational cycle of de-institutionalization culminated in 2014 with the creation of Social Cooperative in 7th Psychiatric Sector, named "Archipelagos".

In the following years, IASIS NGO expanded its activities offering services to other vulnerable groups:

- 1.Homeless people (60 protected houses offered for accommodation of homeless people, counselling services and on the job training, with the support of DIKEOMA social enterprise)
- 2.Asylum Seekers/ Refugees (70 families, Host Unit for 350 asylum seekers, Hostel for 20 unaccompanied teenagers, Psychosocial Support Service of 2.500 persons)
- 3.Children at risk (Hostel for 100 children / victims of war)
- 4.Abused Women (Support of 200 women)
- 5.Unemployed people (Support for 90 persons)
- 6.Youngsters at Social Exclusion Risk/Young Offenders (CONNECT YOUR CITY Youth Centres, Anti-bullying Work Group "Ailios").
- 7.Youth suffering from mental health disorders (80 people)

The organization has also developed a strong network across Europe, through which there have been designed and implemented dozens of Research & Educational Programs in the context of European and national frameworks (Erasmus+, Life Long Learning, EAA Grants, EFM etc.).

The last step to establish IASIS NGO as integrated Center for Psychosocial Education & Training is its certification as a VET Centre by the Greek National Accreditation Organization, a process that warrants the organization as an institution for professional development of both beneficiaries and professionals.

Currently IASIS employs around 20 people most of whom are either youth workers or physiologists working with the various groups of people that we cater for. We also have a strong of volunteers that help us during most of the activities that we run, especially large events that are open to the public as well.

**ATTENTION DEFICIT
HYPERACTIVITY DISORDER**

INTRODUCTION

Attention Deficit Hyperactivity Disorder (ADHD) symptoms occur in more than 10% of school-age children, the diagnosis criteria are confirmed in 3–5% of them. It is most often diagnosed between the ages of 8–10, when learning and behavior problems occur at school. (Elven & Eiman, 2017)

An important breakthrough in the history of ADHD occurred in 1980, when psychologist Virginia I. Douglas emphasized the primacy of attention deficit, not hyperactivity, in ADHD, and the American Psychiatric Association (APA) first named the disorder Attention Deficit Disorder (ADD) (with or without hyperactivity) (APA, 1980). During the following years, the description of the disorder and the criteria for diagnosis were refined and today this condition is called Attention Deficit Hyperactivity Disorder, or ADHD. (APA, 2013)

There have been many researches for the causes of ADHD. However, despite numerous studies and observations, the exact cause is unknown. It is believed that the causes can lie in genetics, environment, trauma and many other things.

DEFINING ADHD

Attention-deficit/hyperactivity disorder (ADHD) is a chronic condition that affects millions of children and often continues into adulthood. ADHD includes a combination of persistent problems, such as difficulty sustaining attention, hyperactivity and impulsive behavior. ADHD is a condition that affects people's behavior (Ditzell, 2021). It can make them seem restless or hyperactive, have trouble remembering things and focusing on tasks, and they may often act on impulse without stopping to think. It can affect people throughout their lives, disrupting relationships and making everyday life difficult. Symptoms of ADHD can be mistaken for other conditions or overlooked altogether. Sometimes people with ADHD have been seen as people suffering with anxiety or simply as people with behavioural problems and people that are there ready to cause trouble and thus they were labelled as the trouble makers. (National Institute for Health and Care Excellence, 2018). This would eventually lead to them being sidelined and avoided as much as possible especially in certain environments like schools.

According to the Diagnostic and Statistical Manual of Mental Disorder, Fifth Edition (DSM-5) ADHD has 3 subtypes: predominantly inattentive, predominantly hyperactive-impulsive and combined inattentive & hyperactive-impulsive.

PREDOMINANTLY INATTENTIVE

As the name suggests, people with this type of ADHD have extreme difficulty focusing, finishing tasks, and following instructions. Experts also think that many children with the inattentive type of ADHD may not receive a proper diagnosis because they don't tend to disrupt the classroom. Research suggests this is more common among girls with ADHD. (Ditzell, 2021)

PREDOMINANTLY HYPERACTIVE-IMPULSIVE TYPE

People with this type of ADHD primarily show hyperactive and impulsive behavior. This can include fidgeting, interrupting people while they're talking and not being able to wait their turn. Although inattention is less of a concern with this type of ADHD, people with predominantly hyperactive-impulsive ADHD may still find it difficult to focus on tasks. (Ditzell, 2021)

COMBINED HYPERACTIVE-IMPULSIVE AND INATTENTIVE TYPE

This is the most common type of ADHD. People with this combined type of ADHD display both inattentive and hyperactive symptoms. These include an inability to pay attention, a tendency toward impulsiveness, and above-average levels of activity and energy. (Ditzell, 2021)

CAUSES OF ADHD

ADHD is caused by differences in the brain's ability to pay attention, slow down, and be patient. Most kids who have ADHD have a parent or relative with ADHD. ADHD is not caused by eating too much sugar. And it's not something a kid does on purpose. ADHD comes from intrinsic factors, some of which the person that experiences them cannot control and thus ADHD takes over and it is manifested in the things that the person does (Hasan, 2017)

If parents think their child might have ADHD, they can talk with the doctor about it. There are no lab tests or blood tests for ADHD. But doctors are trained to know what signs to look for. The doctor will ask questions about what's going on in the child's life and at school. The doctor will ask things like if he/she has trouble doing homework, sitting still, slowing down, or listening – and how long that's been going on. The doctor will check to make sure another health or learning issue is not the cause. (Hasan, 2017)

WHAT TAKES PLACE IN THE BRAIN?

To describe what is happening in the brain of people with ADHD, it is best to show visually through the following video:

[Your Child's ADHD Circuit: How ADHD Works #ADHD](#)

Researchers reported that people with ADHD had smaller brain volume in five subcortical areas, and their total brain size was smaller, too. These differences were greater in children and less in adults. Parts of the ADHD brain mature at a slower pace (approximately one to three years) and never reach the maturity of a person who does not have ADHD. Another interesting finding was that the amygdala and hippocampus are smaller in the brains of people with ADHD. These areas are responsible for emotional processing and impulsivity and had previously not been definitively connected to ADHD. (Sinfield, 2021)

One study published in 2021 found that children with ADHD do not have the same connections between the frontal cortex of the brain and the visual processing area. This suggests that the ADHD brain processes information differently than a non-ADHD brain. (Sinfield, 2021)

SYMPTOMS

The symptoms of ADHD can be divided into two groups: inattentive behaviours and hyperactive and impulsive behaviours: inattentive behaviours and hyperactive – impulsive behaviour. Inattentive symptoms can include being very distractible, having difficulty remembering and poor organisation. Hyperactive and impulsive symptoms can include impatience, excessive movement, talking and interrupting as well as difficulties when talking. (Foley, nd) The challenges more thoroughly, but also advantages are shown in the table below.

THE THREE MAIN CHARACTERISTICS OF ADHD	CHALLENGES	ADVANTAGES
Inattention	<p>Difficulty concentrating Forgetful</p> <p>Mind wandering – daydreaming & easily bored</p> <p>Difficulty following a logical sequence of thoughts or actions</p> <p>Easily distracted Procrastination – difficulty making a decision or starting a task</p> <p>Poor short and long term memory</p>	<p>Imaginative</p> <p>Enjoys new experiences and novelty</p> <p>Good ‘visual imagery’ – thinking in pictures</p> <p>Creativity</p> <p>Thinking outside the box</p>
Impulsive	<p>Saying or doing things without thinking through the consequences</p> <p>Disorganised Interrupt others</p>	<p>Curious Enthusiastic Adventurous</p> <p>Creative thinkers Solution focused</p>
Hyperactive	<p>Fidgeting</p> <p>Difficulty staying still</p> <p>Needing to move about</p>	<p>Energetic Drive</p> <p>Hard working Enthusiastic</p>

(ADHD Foundation, nd)

ADHD can be different for different people. The following is a video displaying different kids' experiences.

WHAT'S IT LIKE TO HAVE ADHD?

There is evidence through research that shows that ADHD symptoms in boys and girls are different. Girls are more likely to be diagnosed with mostly Inattentive type of ADHD, in which daydreaming and shyness are common. (ADHD Foundation, nd; Low, 2022)

If a girl is hyperactive, she might be described as a "tomboy" because she likes physical activity and doesn't seem to enjoy the same things as other girls her age. ADHD in girls might also show up in less obvious ways that still involve always being in motion, such as by doodling constantly or always moving around in her chair. (Low, 2022)

Girls and women definitely blame themselves more on a daily basis. If boys do badly on a test, they might say, "What a stupid test," while girls tend to say, "I'm an idiot". Girls have shame about feeling different, confused and overwhelmed, but they're often very good at hiding it. Fortunately over the past few decades, pediatricians, teachers and parents have gotten a lot better at spotting ADHD in girls. In the 1990s, scientists believed it was as much as nine times as common in boys, and very few girls were diagnosed. Today's diagnosis rate has narrowed to 2.5 boys to every girl. (Ortega, 2020)

In the following video there is more information as well as experience of being a woman with ADHD.

ADHD in Women

Some people with ADHD have fewer symptoms as they age, but some adults continue to have major symptoms that interfere with daily functioning. In adults, the main features of ADHD may include difficulty paying attention, impulsiveness and restlessness. Symptoms can range from mild to severe. (Mayo Clinic, 2019)

Many adults with ADHD aren't aware they have it – they just know that everyday tasks can be a challenge. Adults with ADHD may find it difficult to focus and prioritize, leading to missed deadlines and forgotten meetings or social plans. The inability to control impulses can range from impatience waiting in line or driving in traffic to mood swings and outbursts of anger.

OUTDOOR ACTIVITIES FOR CHILDREN AND YOUNG PEOPLE WITH ADHD

In this video is a story about adventure camps for youngsters with ADHD and how outdoor has helped these people that have the condition of ADHD

How Adventure Helps ADHD

Children and young people with ADHD are often physically less active and therefore have a tendency to obesity (Verret, 2012). In 2012, a study was conducted in Canada, with the aim to evaluate how physical activity affects the physical fitness and motor functions of children with ADHD, their behavior and cognitive functions. As a result of the 10-week training program, the children's test scores (especially the movement subgroup results), behavioral aspects (social problems, thinking difficulties, attention disorders) and also neurophysiological/cognitive parameters improved – at the end of the training program, the children in the training group had better information processing skills and more sustained attention (Verret, 2012). Based on this study, outdoor sports activities could be implemented in the youth work field.

It has also been found that effective methods include massage and stretching exercises (or yoga), swimming and exercises in the water, hippotherapy and cognitive orientation to daily activities (CO-OP therapy). As a result of stretching, stress tolerance, concentration, balance and flexibility will improve. (Kabrits, 2018)

Using animals in therapy helps build a trusting relationship between the therapist and the child and lowers the child's anxiety while stimulating the child's social thinking and communication. In addition, animal therapy is an interesting and fun therapeutic approach for children. Horses are used in hippotherapy and patients experience motion stimulation during the therapy. (Jang, 2015)

In this method, the therapist uses repetitive rhythmic movements on the horse and various verbal cues to provide the child with both motor and sensory input with the goal of improving physical and social skills. It is assumed that hippotherapy strengthens the child's skeletal-muscular system, develops motor planning, improves balance and posture, and promotes the development of social communication. (Jang, 2015)

CONCLUDING REMARKS

There are many myths about ADHD, also among people working with young people. Though it is really important to be open minded about the symptoms and to consider that kids with ADHD are not all the same.

A study into the association of ADHD, developmental patterns and functioning of young people found that those with ADHD were at higher risk of falling into the NEET demographic (Not in Education, Employment or Training) and facing criminal convictions. By extension, this can further complicate the transition from education to employment. (Agnew-Blais, 2018)

Therefore, it is really important to support youngsters in non-formal education, be understanding and do networking between youngsters, youth center, school and parents.

More material on ADHD, that can be helpful for youth workers:

<https://www.adhdfoundation.org.uk/resources/> materials about ADHD

<https://www.additudemag.com/category/adhd-podcast/> podcast

<https://youthfuturesfoundation.org/wp-content/uploads/2021/12/ADHD-Report-final-v2.pdf> Young people, ADHD and employment

**ADDICTIONS / SUBSTANCE USE
DISORDER**

INTRODUCTION

“Substance use disorder”, is a global problem that costs many millions of lives each year and causes untold suffering. It can involve ingesting licit and illicit psychoactive drugs (e.g. alcohol, nicotine, opioids, stimulants, steroids, prescription painkillers, sedatives or cannabis) or other kinds of activity (e.g. gambling, computer gaming). The science of addiction has advanced to a point at which it is now the time to examine the wide range of underlying mechanisms that have been identified and assess what these imply for the development of a comprehensive strategy for combating the problem. Addictions are like a new plague that is infecting Western societies and it needs to be addressed (West, 2013)

DEFINITION OF ADDICTION

Definitions of addiction vary, but all involve the notion of repeated powerful motivation to engage in an activity with no survival value, acquired through experience with that activity, despite the harm or risk of harm it causes. For many people, the concept of addiction is that of taking drugs and other substances. It is of no surprise that many definitions with regard to addiction evolve around the use of substances. However, addiction is more than just substance abuse. In fact, Griffiths (2005 pg 12), defines addiction as:

“A repetitive pattern that increases the risk of diseases and/or associated personnel and social problems. Addictive behaviors are usually seen as loss of control, where the behavior continues to occur despite attempts to abstain or moderate use.”

Additionally, it has also been said that addiction can be described as a process, with addictive behavior being placed on a spectrum of severity of the use and abuse (Goodman,1990). Goodman, continues by saying that addiction can include both substance and non-substance behaviour.

There are many things that can fall under the scope of addiction. These include chemical addiction, gambling, sex and relationships, food, work, and shopping.

ADDICTIVE BEHAVIOUR MODELS

When it comes to addiction one can find four models known as the “models of addiction”. These models are:

- The medical model
- The moral model
- Addiction as a psychological construct
- Addiction as a sociological construct

THE MEDICAL MODEL ADDICTION AS A BIOLOGICAL CONSTRUCT

The biological model of addiction emphasizes the importance of genetics and the biological forces of nature. The theory suggests that brain chemistry, brain structure, and genetic abnormalities cause human behaviour to be different. In this model, addiction is seen as a chronic disorder (West, 2013). According to the biological model, each person's unique physiology and genetics cause addiction. People differ in the degree to which they like or dislike a particular addictive substance or activity. Some people may enjoy a substance or activity so much that it becomes very tempting and difficult to resist. Another person would not experience this difficulty because they do not experience a similar enjoyment. Likewise, the ability to temper impulsive desires with rational thought is a brain function that varies among different people. Some people may have a deficiency in their capacity to resist certain types of impulses. Thus, these people would be at greater risk of developing an addiction because of their genetic vulnerability (Barnett, Hall, Dilkes-Frayne & Carter, 2018).

The model also sees that addiction is progressive and can be fatal over time. As it is a genetic disorder, the individual has a predisposition to this behaviour and the individual is at risk of future addictive involvement (Barnett et al, 2018).

THE MORAL MODEL

In the moral model of addiction, the theory states that those suffering from addiction are a product of poor choices, lack of willpower and an unwillingness to change their lives. The moral model puts the responsibility of addiction in the hands of the person who is actually suffering from addiction (Avery, Mouallem, Demner & Cooper, 2020).

ADDICTION AS A PSYCHOLOGICAL CONSTRUCT

Psychological dependence is largely referred to as the cognitive and emotional aspects of addiction or withdrawal from drugs and alcohol. Rather than the body's physical change as a result of drug abuse, the psychological model of addiction is centred on emotions related to using these substances (Griffiths, 2005).

Psychological addiction, as opposed to physiological addiction, is a person's need to use a drug out of a desire for the effects it produces, rather than to relieve withdrawal symptoms.

Heroin, for example, produces a physical dependence; the drug eventually takes the place of natural endorphins, so addicts may use heroin simply to reduce pain. Other drugs, like marijuana, do not create a physical dependency. However, one may become psychologically addicted if he/she comes to depend upon the drug's effect as part of normal existence (Avery et al, 2020).

ADDICTION AS A SOCIOLOGICAL CONSTRUCT

Social constructionism is a theory in sociology which proposes that certain ideas about physical reality arise from collaborative consensus, instead of pure observation of said reality. The theory centres on the notion that meanings are developed in coordination with others rather than separately by each individual. Some might see that addiction is actually not a deviation from the norms that society creates (Kutschera, 2019).

WHAT HAPPENS IN SUBSTANCE USE DISORDER?

Research has come a long way in helping us understand what happens in a person's brain who becomes addicted. Research by Erickson (2007) and others have revealed that addiction affects the brain circuits involved in reward, motivation, memory and inhibitory control. When these circuits are distributed, so is a person's capacity to freely choose to not to do addictive behaviour like taking drugs, drinking alcohol and gambling. This loss of capacity to freely choose also happens when it means that the person is risking losing everything that they used to value. This inability to stop this urge of addiction is compared to a ride in a car without brakes. (Avery et al, 2020).

Within our bodies, we have mechanisms that help us to maintain homeostasis which is a balance within us. Many areas of the brain work together to maintain this homeostasis. The "mesolimbic" pathway makes use of rewards, which is usually a good sense of well-being or pleasure, to promote life sustaining and life fulfilling behaviours. What happens in addiction is that we see a dysregulation of this natural function. (Erickson, 2007)

Drugs for example, are identified by their ability to stimulate dopamine secretion in this pathway. In fact, addicts are identified by their unique response to addictive chemicals by excessive production of dopamine in this brain pathway. As a consequence of drug addiction, the brain rewards the harmful behaviour. It encourages drug addiction, keeping the individual in a cycle of highs and lows; the user may feel like they are on an emotional roller-coaster, feeling desperation and depression without their substance of abuse. Once someone suddenly stops using, there are harsh mental, physical, and emotional results. Individuals may experience distressing symptoms they cannot ignore for some substances; withdrawal symptoms are generally stronger for some substances than others. (Penzenstadler, Soares, Karila & Khazaal, 2019)

Withdrawals are often seen as a negative symptom that mirror the positive effect of the addiction that a person has. This withdrawal effect is found in all addictions and not just substance abuse. The type of withdrawal varies according to the type of addiction and on how heavily one is addicted. If one manages to overcome an addiction and go over the withdrawal phase, he/she still has some important decisions to make, since the pleasure system remains impaired for months to years and thus, it keeps interfering with the thoughts of the person and that is why relapses take place (Penzenstadler et al, 2019).

WHAT CAUSES ADDICTIONS?

There is no one thing that causes addiction, rather it is a complicated mix of factors that combine to drag a person into the cycle of addiction. Evidence shows that the following can all contribute to a person becoming addicted:

- **Genetics:** Researchers demonstrated that a type of small infectious agent (a type of RNA virus) integrates within a gene that regulates activity of dopamine. This integration is more frequently found in people with substance use disorders, and is associated with drug addiction.
- **Environment and family:** Research by Avery et al (2020) has shown that there is a higher chance of addictions for people coming from families where a particular addiction is already found. Therefore, if a person comes from a family where alcoholism is a problem, they are at a higher risk of developing substance abuse issues of their own.
- **Social groups:** Research by various authors including Kirezli & Aydin (2021), have shown that some people go into addictions so as to form part of a group. People crave for social bonds and they want to feel accepted and part of a group. Thus, certain people will slowly start a habit so as to be part of a group and by time this habit becomes an addiction.
- **Personal trauma:** Numerous research studies confirm the link between traumatic experiences in childhood and addictive behaviours in adulthood. One of the most notable is the original study of Adverse Childhood Experiences by Felitti, Anda, Nordenberg, & Williamson (1998). Adverse Childhood Experiences included traumatic experiences within the first 18 years of life such as physical, emotional, and sexual abuse, neglect, loss of a parent, witnessing intimate partner violence, and living with a family member with a mental illness. Trauma and chronic stress related to trauma can lead to a dysregulated stress system, which may make individuals more vulnerable to addictive behaviours. Trauma can lead to depersonalization and numbness, which may make individuals more vulnerable to addictive behaviours. (Felitti et al, 1998)

SIGNS OF ADDICTION

All addictions, whether to substances or to behaviours, involve physical, behavioural and/or psychological processes. The signs and symptoms of addictions can vary from person to person and can also depend on the type of addiction that you are suffering from. However, there are several signs and symptoms that are common to most types of addiction. These include:

Psychological symptoms of addictions:

- Mood swings
- Increased temper
- Tiredness
- Paranoia
- Inability to focus or concentrate
- Poor judgement
- Memory problems
- Diminished self-esteem and self-worth
- Feelings of hopelessness

Behavioural and social signs of addictions:

- Secretive or dishonest behaviour
- Poor performance and/or attendance at work or school
- Withdrawing from responsibility and socialising
- Losing interest in activities, hobbies or events that were once important to you
- Continuing to use the substance, or engage in certain behaviours, despite the negative consequences that these cause
- Trying but failing to reduce or stop misusing a substance, or engaging in certain behaviours
- Lying, especially where they are, with whom they are spending their time and where are they spending their money?

Physical symptoms of addictions:

- Lack of concern over physical appearance/personal hygiene
- Disrupted sleep patterns.
- Changes in social groups, new and unusual friends, odd phone conversations
- Financial problems

These are the general symptoms that people with addiction exhibit. Apart from these general symptoms there are also more specific symptoms that are related more directly to the type of addiction that the person has.

COMPLICATIONS AND COMORBIDITIES OF ADDICTIONS

Addictions have a wide range of serious complications, many of which can be life-limiting and potentially dangerous. Some of these complications include: accidents, financial problems as most habits are expensive to maintain and people may end up without work when addicted to certain types of lifestyles, health problems, legal issues especially when abuse of illegal substances takes place. There can also be relationship and family problems as relationships are not being nurtured any more. Higher risk of suicide comes mainly because of the negative feeling and resentments that addictions brings and work problems, due to a decrease in concentration (West, 2013)

YOUNG PEOPLE AND ADDICTIONS

Adolescence is a time of firsts: first cigarette, first drink, first love and so on. It is a time where the young people are having a moratorium and they are trying new things as they are exploring their identities to see which identity they would like to be associated with. It is important to note that some people are more prone to be engaged in addictive behaviour than others (Penzenstadler et al, 2019).

Addictive behaviour especially certain addictions like substance abuse can interfere with the growth and the development of the young person both physical growth but most impacted is the mental growth. Substance abuse for example can impact the brain's ability to function in the short term as well as prevent proper growth and development in the long term. Therefore, addictions and certain habits at a young age, can leave a longer non desired impact on a young person (West, 2013).

USING OUTDOOR TO ADDRESS ADDICTIONS

Nature has been gaining more and more traction when it comes to treating certain mental health conditions. The use of nature in therapy is known as wilderness therapy. Wilderness therapy has been around since the early 1960s. It uses engaging activities in the wilderness to gain self-discovery and address negative circumstances in your life. Wilderness therapy has been found to help people with addiction in a number of ways (Fernee, Mesel, Andersen, & Gabrielsen, 2019). In this research when mentioning wilderness therapy we will be referring to sessions taking place in the outdoors, rather than residential therapeutic programmes.

As outlined, addictions are the combination of several factors. One of the factors that lead to addiction is the need for social bonds and some people are addicted to certain behaviours so that they are accepted in a group of which they would not have been accepted if they were not for example addicted to drugs or nicotine. This shows that people crave for human connections and thus creating groups that go out together in nature will help people to build up social bonds. Social support, connection, and conflict were emphasized as common elements of participants' overall OLE (outdoor learning experience). Participant open-ended responses suggested that youth experienced connection with others during their OLE experience. Representative comments such as, "I met a lot of new people that I really liked" (P108) and, "my wilderness experience was fun and the connections I could make with students and staff alike is what kept me motivated" (P55) exemplify this. Further, as this previous quote reveals, support and connection were often described as being related. Some participants also reported that their experience of connection and support was fluid throughout their OLE experience.

Connecting people with others who are also passing through the fight against addiction themselves, will help them realize that they are not alone and that there are others experiencing the same thing and they can support each other through this journey (Kutschera, 2019). Apart from that people who are in addiction usually have friends and places that are connected with their addiction. That means that they usually have a group of friends with whom they practise their addiction and they also frequent places where they usually carry out their addiction and thus by going there it would be easier for them to relapse. Therefore, through wilderness therapy one is getting detached from those places and from those people that remind this person of their addiction.

One of the realities that make people relapse into their addiction, is the fact that as discussed, addictions take over our reward system in our brain and it affects the secretion of "good feel hormones" like serotonin, dopamine, and endorphins in our system. Activities in nature help the people to engage in various activities and/or challenges that are rewarding when they are done. The aim is to replace old habits with healthy, new ones and get the secretion of "good feel hormones" from such activities in nature rather from the addiction that they previously had (Avery et al, 2020). As Dyer (2020) found out, therapy places individuals into an unfamiliar outdoor environment to focus on self-improvement and helps them in overcoming problem behaviours with coping skills. This is why it is important that a person must be clean from their addiction for at least four weeks before they embark on this new journey of wilderness therapy. The overall goal is to foster personal and social responsibility while encouraging emotional growth. Wilderness Therapy, seems to provide the space where young people get the opportunity to create bonds outside of context that drew them to substance abuse. It helps them create and build these new bonds and this will help to become independent of the previous social bonds that they had that were bringing them closer to their addictions.

Research by Kutschera (2019), has shown that vitamin D plays a vital role both in the physical health and also in the mental health of a person. There is sufficient research to show that not having enough of the vitamin can lead to depression-like symptoms. People who have inadequate vitamin D levels may possibly crave opioids, thus putting them at a higher risk of developing an addiction (Ventura Recovery Centre, nd). These signs and feelings of depression can then make the person try to elevate happiness through addictive activities that usually boost their “feel good hormones” for a short while. Therefore, when humans spend time outside in nature and in the sun, the amount of vitamin D in their bodies increases. This is an essential nutrient needed to help heal the body from addiction. Low levels in the system can lead to an increased risk of relapse. By simply spending time outside in the sun, one can advance the effectiveness of his/her recovery (Kemény et al, 2021).

When someone is trying to overcome addiction, the brain is constantly sending impulses that remind the person about the “feel good factor” that the addiction that they have brings to them. The brain and sometimes the body crave for this feel-good factor and that makes the person get tempted to go over again to his/her old habits. Wilderness therapy and activities outside in nature, can help the person to enjoy outdoor activities while keeping his/her brain focused on outdoor activities so as to have less time to wander about their addiction. Apart from that as the activities release the “feel good hormones”, the person will not feel the need to relapse in their addiction to feel good.

FAMILY THERAPY OF YOUTH WITH SUBSTANCE MISUSE

When talking about substance misuse and overcoming this, one cannot forget that it is very important that when working with adolescents who are trying to overcome substance abuse, one has to also involve the family in the whole process. One has to keep in mind that according to Maslow’s hierarchy of needs, a person has different levels of needs and one of them is the need of food and the need to feel safe in our environment including home. In this way the therapist working to help the young person, would be addressing the different difficult points that the young person has and there would be a higher chance of maintaining recovery once a person stops making the substance misuse.

CLOSING REMARKS

Getting over an addiction is not an easy road and it needs a lot of effort both from the person passing through addiction and the people helping him/her overcome addiction. In therapy given through wilderness therapy, the therapist will help the person to first detach from the stuff that reminds the person of his/her addictions like friends and environments that the person used to frequent. The next step is that of helping the person create new habits that will give the same “feel good factor” to the person so that he/she would not need to go back to their addiction.

INTRODUCTION

Today we are living in a world where it became normal or like a cliché to hear someone say that they feel anxious about something or another. Anxiety is a typical and frequently healthy emotion. However, it could develop into a medical disorder if a person experiences excessive levels of worry on a regular basis. A group of mental health conditions known as anxiety disorders cause excessive trepidation, fear, apprehension, and worry (Julian, 2011). In addition to generating physical symptoms, this condition may change how a person behaves and processes emotions. While mild anxiety may be hazy and unpleasant, severe anxiety may significantly interfere with day-to-day activities and lead to problems in a person's normal life. (Chorpita & Barlow, 1998)

DEFINITION FOR ANXIETY

Anxiety is a feeling of fear, dread, and uneasiness. It might cause a person to sweat, feel restless and tense, and have a rapid heartbeat. It can be a normal reaction to stress. For example, one might feel anxious when faced with a difficult problem at work, before taking a test, or before making an important decision. (Craske et al, 2011).

Experiencing occasional anxiety is a normal part of life. However, people with anxiety disorders frequently have intense, excessive and persistent worry and fear about everyday situations. Often, anxiety disorders involve repeated episodes of sudden feelings of intense anxiety and fear or terror that reach a peak within minutes (panic attacks). (Julian, 2011)

These feelings of anxiety and panic interfere with daily activities, are difficult to control, are out of proportion to the actual danger and can last a long time. You may avoid places or situations to prevent these feelings. Symptoms may start during childhood or the teen years and continue into adulthood. (Chorpita & Barlow, 1998)

DIFFERENT TYPES OF ANXIETY

Anxiety is the result or the outcome a stressor that makes the person feels anxious to the actual situation or stressor that make person feel anxious. There are different types of anxiety disorders with the 5 major types of anxiety disorders being the following.

Generalized Anxiety Disorder: Generalized anxiety disorder (GAD) usually involves a persistent feeling of anxiety or dread, which can interfere with daily life. It is not the same as occasionally worrying about things or experiencing anxiety due to stressful life events (Stein & Sareen, 2015). People living with GAD experience frequent anxiety for months, if not years. Common worries with GAD include health, money, family, or work. While everyone worries about these things once in a while, if one always expects the worst, it can get in the way of living a normal life and thus become a problem (Fricchione, 2004).

Obsessive–Compulsive Disorder: Obsessive–compulsive disorder (OCD) is a common, chronic, and long–lasting disorder in which a person has uncontrollable, reoccurring thoughts ("obsessions") and/or behaviors ("compulsions") that he or she feels the urge to repeat over and over. People with OCD may have symptoms of obsessions, compulsions, or both (Jones et al 2018). These symptoms can interfere with all aspects of life, such as work, school, and personal relationships. Obsessions are repeated thoughts, urges, or mental images that cause anxiety. Common symptoms include: Fear of germs or contamination, unwanted forbidden or taboo thoughts involving sex, religion, or harm, aggressive thoughts towards others or self, having things symmetrical or in a perfect order. Compulsions are repetitive behaviours that a person with OCD feels the urge to do in response to an obsessive thought. Common compulsions include: Excessive cleaning and/or handwashing, ordering and arranging things in a particular, precise way, repeatedly checking on things, such as repeatedly checking to see if the door is locked or that the oven is off and compulsive counting (Pauls, Abramovitch, Rauch & Geller, 2014). Not all rituals or habits are compulsions. Everyone double checks things sometimes. But a person with OCD generally: Can't control his or her thoughts or behaviors, even when those thoughts or behaviors are recognized as excessive, spends at least 1 hour a day on these thoughts or behaviors, doesn't get pleasure when performing the behaviors or rituals, but may feel brief relief from the anxiety the thoughts cause, experiences significant problems in their daily life due to these thoughts or behaviors (Pauls, Abramovitch, Rauch & Geller, 2014).

Panic Disorder: People with panic disorder have frequent and unexpected panic attacks. Panic attacks are sudden periods of intense fear, discomfort, or sense of losing control even when there is no clear danger or trigger. Not everyone who experiences a panic attack will develop panic disorder. People with panic disorder often worry about when the next attack will happen and actively try to prevent future attacks by avoiding places, situations, or behaviours they associate with panic attacks. Panic attacks can occur as frequently as several times a day or as rarely as a few times a year (Weissman & Merikangas, 1986). Panic disorder is characterized by brief or unexpected episodes of extreme anxiety and apprehension. Shaking, confusion, nausea, dizziness, and/or breathing difficulties might result from these attacks. Attacks of panic frequently start out mild and quickly worsen, culminating after ten minutes. A panic episode, however, could linger for several hours. While they frequently follow terrifying events or periods of intense stress, panic disorders can also strike suddenly. A person having a panic attack could mistake it for a serious sickness

and alter their conduct drastically to prevent further attacks. A person may feel overpowering feelings, such as helplessness and terror, during a panic attack. Rapid breathing, shivering, sweating, and a quick heartbeat are examples of physical symptoms. Specific conditions that cause increased stress are common triggers of panic attacks. However, for other people, they occur repeatedly with no apparent cause. The individual in this situation may have panic disorder.

Social Anxiety Disorder: Social anxiety disorder is an intense, persistent fear of being watched and judged by others. For people with social anxiety disorder, the fear of social situations may feel so intense that it seems beyond their control. For some people, this fear may get in the way of going to work, attending school, or doing everyday things. People with social anxiety disorder may experience: Blushing, sweating, or trembling, pounding or racing heart, stomach aches, rigid body posture or speaking with an overly soft voice, difficulty making eye contact or being around people they don't know, feelings of self-consciousness or fear that people will judge them negatively

Separation anxiety disorder: Separation anxiety is often thought of as something that only children deal with; however, adults can also be diagnosed with separation anxiety disorder. People who have separation anxiety disorder have fears about being parted from people to whom they are attached. Due to the actual or projected separation from a particular attachment figure, a person may experience extremely high levels of anxiety. This could be a person, a location, or even a creature. Physical signs of separation anxiety, such as nausea and headaches, might also appear. These people, often worry that some sort of harm or something untoward will happen to their attachment figures while they are separated. This fear leads them to avoid being separated from their attachment figures and to avoid being alone. People with separation anxiety may have nightmares about being separated from attachment figures or experience physical symptoms when separation occurs or is anticipated (Stein & Sareen, 2015). Separation anxiety disorder is characterized by intense anxiety following separation from a person or environment that gives one a sense of security or safety. Panic symptoms can occasionally be brought on by separation. People occasionally label adults with separation anxiety disorder as being overprotective or overbearing. Trusted Source However, they frequently use their behavior as a means of communicating their separation anxiety as adults (Julian, 2011).

RISK FOR ANXIETY DISORDER

A mix of genetic and environmental factors can raise a person's risk for developing anxiety disorders. One may be at higher risk if they have some of the following: Certain personality traits, such as shyness or behavioral inhibition – feeling uncomfortable with, and avoiding, unfamiliar people, situations or environments. Stressful or traumatic events in early childhood or adulthood. Family history of anxiety or other mental health conditions. Certain

physical conditions, including thyroid problems and heart arrhythmias (unusual heart rhythms). (Spence, 1998)

Anxiety disorders occur more often in women. Researchers are still studying why that happens. It may come from women's hormones, especially those that fluctuate throughout the month. The hormone testosterone may play a role, too – men have more, and it may ease anxiety. It's also possible that women are less likely to seek treatment, so the anxiety worsens. (Spence, 1998)

SYMPTOMS OF ANXIETY

The symptoms of anxiety vary, depending on the type of anxiety a person is suffering from. There is a number of signs and symptoms that are similar for all the types of anxiety, while there are some symptoms that are specific to the type of anxiety that one is experiencing.

- **Generalized Anxiety Disorder:** The symptoms in generalized anxiety disorder (GAD) usually include: Feeling restless, wound-up, or on-edge, being easily fatigued, having difficulty concentrating, being irritable, having headaches, muscle aches, stomach-aches, or unexplained pains, difficulty controlling feelings of worry and having sleep problems, such as difficulty falling or staying asleep (Fricchione, 2004).
- **Obsessive-Compulsive Disorder:** The symptoms of obsessive-compulsive disorder (OCD) usually include: Fear of germs or contamination, unwanted forbidden or taboo thoughts involving sex, religion, or harm, aggressive thoughts towards others or self, having things symmetrical or in a perfect order. (Pauls, Abramovitch, Rauch & Geller, 2014)
- **Panic Disorder:** The symptoms in panic disorder usually are, pounding or racing heart, sweating, trembling or tingling, chest pain, feelings of impending doom and feelings of being out of control (Julian, 2011)
- **Social Anxiety Disorder:** The symptoms in social anxiety disorder usually are Blushing, sweating, or trembling, pounding or racing heart, stomach aches, rigid body posture or speaking with an overly soft voice, difficulty making eye contact or being around people they don't know, feelings of self-consciousness or fear that people will judge them negatively

OVERCOMING ANXIETY

The best way to overcome anxiety is to actually targeting the root cause of what causes anxiety and making sure to address that so as to not have episodes or triggers that make you anxious (Stein & Sareen, 2015). Stress management: Reducing possible triggers can be accomplished by learning to handle stress. Making a note of any impending deadlines and

obligations, organize any stresses and deadlines, and make a commitment to taking time off from work or studies. Relaxation methods Simple exercises can ease anxiety's physical and emotional symptoms. These methods include yoga, deep breathing exercises, lengthy baths, meditation, and nighttime relaxation (Mayo Clinic, 2020). Positivity-boosting activities to counteract negative thinking: One person can make a list of any negative thoughts that are possibly cycling through your mind as a result of your anxiety, and then make a list of credible, uplifting thoughts to replace them. If anxiety symptoms are related to a particular reason, such as a phobia, it can also be beneficial to visualize facing and overcoming a particular fear.

Support system Speak to helpful friends or family members who are acquainted to you. Online and nearby support group programs might also be accessible. Exercise: Being physically active releases chemicals into the brain that enhance mood and self-image (Woody, 2019).

Today a number of approaches are being made use of so as to tackle anxiety. In today's world we can see a combination of psychotherapy, behavioral therapy, and medication being used as treatments.

There are various different kinds of medication that can help someone control their anxiety. Antidepressants, benzodiazepines, tricyclics, and beta-blockers are some of the medications that may be able to manage some of the physical and psychological symptoms.

RECOMMENDATIONS ON HOW TO USE OUTDOOR FOR ANXIETY

Anxiety, tension, and despair can all be greatly reduced by a short trip outside. Numerous studies have demonstrated that being in nature is good for your mental health. Nature's sights, sounds, and sensations can instantly lift your spirits.

Spending time in nature has a direct correlation with fewer negative feelings. This comprises indications of a psychosomatic condition, such as irritability, sleeplessness, tension headaches, and indigestion, as well as indications of anxiety, depression, and both.

Exposure to nature has been linked in studies to stress reduction. Muscle tension, blood pressure, and mental activity are all reduced by stress within minutes of exposure to nature. Spending time in green areas greatly lowers the stress hormone cortisol. Happiness-enhancing endorphin and dopamine production are also increased by nature (Regier et al., 2022).

Nature has myriad other brain benefits as well. Contact with nature has restorative properties, increasing energy and improving feelings of vitality and focus. Being nearby to nature has been shown to reduce symptoms of ADHD (BMC, n.d.)

- Start by going for a stroll through the forest. Walking in the outdoors reduces stress and enhances mental health. Do you want to improve your walk? Take a woodland bath.
- Take your exercise outside. Physical activity in natural settings on a regular basis can cut the risk of mental health issues by 50%. Walking, cycling, jogging, or practicing yoga in a natural setting makes you happier than doing it in a metropolis.
- To get the most out of being outside's health advantages, use all of your senses. Take a deep breath since studies have proven that the smell of fresh pine reduces stress and anxiety. Be sure to stop and listen because studies have shown that sounds of nature, such as bird singing and rushing water, can help reduce stress.
- Consider going camping. The greatest way to reap the health benefits of being outside is to spend more time immersed in nature (AACAP, 2019).

CONCLUDING REMARKS

Anxiety is a normal emotion that is necessary for survival when a person finds themselves in a dangerous situation. It is not a medical issue.

When this response amplifies or is out of proportion to the trigger that triggers it, an anxiety disorder develops. Anxiety disorders come in a variety of forms, such as social anxiety, phobias, and panic disorders.

Along with various forms of self-help, medication, counseling, and therapy, treatment usually entails all three (Mayo Clinic, 2019).



DEPRESSION

INTRODUCTION

Depression is ranked by the World Health Organization as the single largest contributor to global disability. The total number of people with depression was estimated to exceed 300 million in 2015, equivalent to 4.4% of the world's population and is more common among females (5.1%) than males (3.6%) (Razzak, H. A. Harbi, A. Ahli, S. 2019). It is also a major contributor to suicide deaths, which number is close to 800 000 per year. (WHO, 2021)

Today the total number of people living with depression in the world is 322 million, in reality the number can be much higher as not everyone seeks help for their depression. Nearly half of these people live in the South-East Asia Region and Western Pacific Region, which indicates that depression risk is higher in relatively larger populations. Particularly in lower-income countries the number of persons with common mental disorders is going up, because the population is growing and more people are living to the age when depression most commonly occurs. (Friedrich, 2017)

WHAT IS DEPRESSION?

Depression is a common but yet serious medical illness that negatively affects how we feel, think and act. Depression causes feelings of sadness and/or a loss of interest in activities we once enjoyed. It can lead to a variety of emotional and physical problems and can decrease our ability to function at work and at home. (American Psychiatric Association, 2020)

DIFFERENT TYPES OF DEPRESSION

Depression is a common but yet serious medical illness that negatively affects how we feel, think and act. Depression causes feelings of sadness and/or a loss of interest in activities we once enjoyed. It can lead to a variety of emotional and physical problems and can decrease our ability to function at work and at home. (American Psychiatric Association, 2020)

- **Major depression** – Includes multiple depression symptoms combined together for a minimum of 2 weeks. During that time a person's ability to work, study and eat are affected in a negative way.
- **Persistent depressive disorder** – Also called dysthymia and means a person is suffering from less severe symptoms of depression, but it lasts much longer, typically for at least 2 years.

- **Perinatal depression** – Major depression occurs when a woman is pregnant or after the child birth, in another word postpartum depression.
- **Seasonal affective disorder** – A person is negatively affected by the yearly seasons, which typically starts in the late autumn and early winter and will go away during spring and summer time.
- **Depression with symptoms of psychosis** – It is a very severe case of depression as a person experiences psychosis symptoms, for example having delusions which are disturbing or hallucinations that make them see and hear things that are not there. (National Institute of Mental Health, 2022)

FACTORS THAT CAN PLAY A ROLE IN DEPRESSION

- **Biochemistry:** Certain chemicals in the human brain are out of the norm which may contribute to having depressive symptoms.
- **Genetics:** Depression can pass on through generations. For example, if one identical twin has depression, the other one has a 70 percent chance of having the illness sometime in life.
- **Personality:** People who are easily overwhelmed by stressful situations tend to have a more pessimistic outlook or have self-esteem issues as well, thus are more prone to experience depression.
- **Environmental factors:** Long periods of suffering under violence, physical or mental abuse, neglect or poverty may induce symptoms of depression. (American Psychiatric Association, 2020)

HOW TO RECOGNIZE DEPRESSION FROM OTHER SOMBER EMOTIONS?

When depression occurs, it affects many or all areas of an individual's life in a negative way. It can disturb sleep, appetite, focus or mood. A person with depression may be fluted with feelings like sadness, guilt, low self-worth or overall loss of energy. Depressive state can last a long time or recurrent, during that time it greatly affects a person's ability to function at school or work or overall ways of coping with daily life. In most severe cases of depression it can lead to suicide. (American Psychiatric Association, 2020)

It is very important to differentiate depression from sadness or grief. When a person goes through life hardships, it is very normal to feel sadness or grief, especially situations like the death of a loved one, loss of a job or the ending of a relationship. Those experiencing loss often might describe themselves as being “depressed “. But being sad is not the same as having depression.

Both grief and depression may involve intense sadness and withdrawal from usual activities. But they are also very different from one another in important ways:

- When in mourning, person experiences feelings of pain and positive memories of the deceased in waves. But when in depression the overall mood and interest are consistently decreased for most of two weeks or longer.
- In grief, self-esteem is usually not affected. In depression, feelings of worthlessness and self-loathing are common.
- When in grieving a person may wish to die in order to join with the deceased loved one, but in depression the wish to die comes from feeling worthless and/or being unable to cope with the pain of depression.

Although grief and sadness are different from depression, for some people losing a job or a loved one, being a victim of a physical assault or any other major disaster in their life can lead them into depression. When both grief and depression are occurring at the same time, the grief is more severe and lasts longer than grief without depression. (American Psychiatric Association, 2020)

WHAT CAUSES DEPRESSION?

Depression can occur for a variety of reasons and no person is safe from it. For some people, an upsetting or stressful life event, such as the deaths of a loved one, divorce, illness, not feeling needed nor wanted, job loss or money worries, can be the cause to trigger a so-called “downward spiral”. Where one stressful event can make a person feel low and look for self-harming ways to cope with the sadness, for example isolating themselves from friends and family or finding comfort in numbing their feelings with alcohol and other drugs. All of this can make a person feel worse and trigger depression. (National Health Services, 2019)

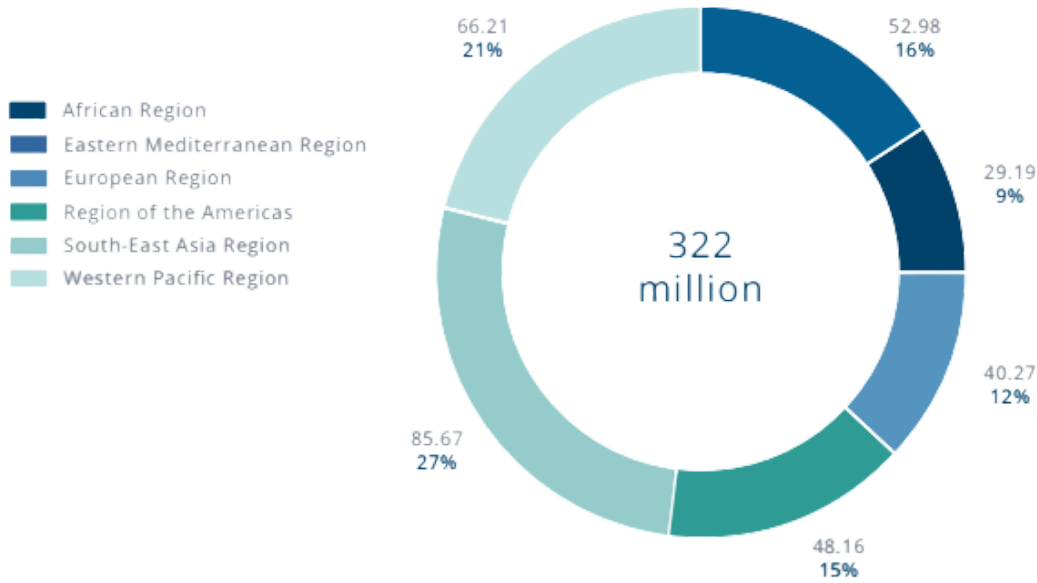
DIFFERENT TRIGGERS FOR DEPRESSION

- **Stressful events** – When experiencing a stressful event a person’s risk of becoming depressed increases, especially when they isolate themselves from friends and family and try to manage with their sorrows alone.
- **Personality** – People with certain personality traits can be more vulnerable to depression, for example low self-esteem issues or being too self-critical. These characteristic traits may come from early childhood experiences or genes inherited from parents, or both.

- **Family history** – A person is more likely to develop depression if someone in their family has had depression in the past, such as a parent or a sibling.
- **Giving birth** – After child birth women are in a very fragile state as the hormonal and physical changes, with the added responsibility of a new life can lead to postnatal depression.
- **Loneliness** – When for some reason a person is being cut off from their family and friends, it can increase the feeling of loneliness tremendously and a person can be at risk of depression.
- **Alcohol and drugs** – When a person is faced with life hardships they may want to find ways to self soothe themselves and for many the solution is drinking excessive amounts of alcohol. Alcohol affects the chemistry of the brain, which increases the risk of depression. Cannabis is used for medical reasons, as it helps to relax and ease pain with some illnesses, but used excessively and for wrong reasons can also bring on depression, particularly in teenagers.
- **Illness** – Having faced longstanding or life-threatening illness, such as coronary heart disease or cancer, can trigger depression. Head injuries are also a cause of depression as a severe head injury can trigger mood swings and emotional issues. For example a minor head injury can damage the pituitary gland that produces thyroid-stimulating hormones which can cause a number of symptoms, such as extreme tiredness and a lack of interest in sex. Also worth mentioning is an underactive thyroid that results from problems with a person's immune system and can also lead to depression. (National Health Services, 2019)

Some studies have also suggested that you're more likely to get depression as you get older, and that it's more common in people who live in difficult social and economic circumstances. The risk of becoming depressed is increased by poverty and unemployment. For example countries with low income are often absent or underdeveloped in providing people services or treatments for depression. Unfortunately it is estimated that more than 75% of people battling with depression in these low income countries do not receive treatment. (World Health Organization, 2021)

**Cases of depressive disorder (millions),
by WHO Region**

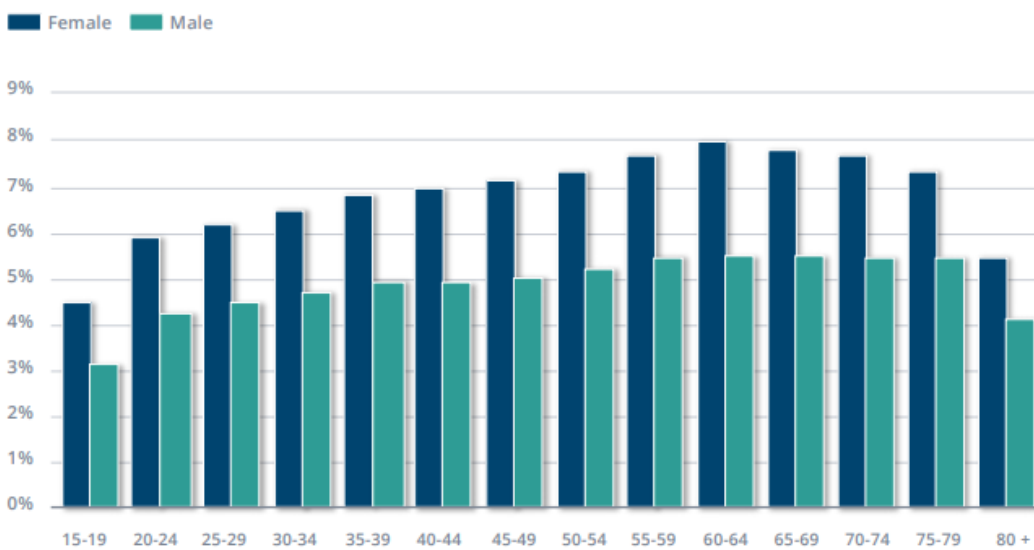


(World Health Organization, 2017.)

WHAT DOES DEPRESSION AFFECT?

Depression can affect anyone from any part of the world, may the person be young or old, rich or poor. It can have a profound effect on all aspects of life, including performance at school, productivity at work, relationships with family and friends, and ability to participate in the community. Although anyone can be affected, research has shown that women are more likely to have depression than men. (World Health Organization, 2017)

Global prevalence of depressive disorders, by age and sex (%)



(World Health Organization, 2017.)

Depression can vary from mild to severe and can affect:

- **Mood** – Feelings of sadness, loneliness, worthlessness or hopelessness.
- **Interests** – Decreased interests or pleasure in activities that once brought joy.
- **Appetite** – Weight may fluctuate due to overeating or undereating because of the feeling of sadness.
- **Sleep routine** – Trouble falling asleep or sleeping too much.
- **Activity level** – Decreased energy, feelings of extreme tiredness.
- **Physical activity** – inability to sit still, pacing, fidgeting or the opposite effect of slowed movements and speech.
- **Purpose of living** – Feeling worthless or guilty. Thoughts of death or suicide.
- **Focus** – Difficulty thinking, concentrating or making decisions. (American Psychiatric Association, 2020)

DEPRESSION IN YOUNG PEOPLE

The younger a person is the more exposed they are to having depression as they are still developing their coping mechanism and therefore can be more sensitive to rejection and criticism. Poorly managed mental health can lead to various negative behaviors that greatly affect the health and development of the adolescent. (National Health Services, 2020) Signs of poor mental health in young person can be seen when they might indulge in risky sexual behavior, teenage pregnancy, truancy/ school dropout, illicit substance abuse etc. (Centers for Disease Control and Prevention, 2019)

Symptoms that may indicate depression in a young person are the same as with everyone, additional would be feeling irritable or grumpy, not looking after their own hygiene and early age of using cigarettes, alcohol or illegal drugs. Sometimes there are no obvious symptoms of depression, but parents have noticed behavioral changes in young people that suggest depression. For example social withdrawal, changes in mood and behavior, lower marks at school, risk-taking behavior. (National Health Services, 2020)

Depression is one of the major risk factors for suicide and self-harm. In a Youth Risk Behavior Survey conducted from 2009 to 2019 it was found that the number of students experiencing persistent feelings of sadness or hopelessness has increased regardless of their race/ethnicity. More than 1 in 3 students and nearly half of female students reported persistent feelings of sadness or hopelessness in 2019 and about 1 in 5 students seriously considered suicide. (Centers for Disease Control and Prevention, 2019)

Depression is a very common mental health problem for young people. There is no single cause for depression, it all depends on the young individual and their response to different life events, also their hormones, chemical imbalances, and genetics can play a role as well.

While each young person will have their own responses to life there are some circumstances that can contribute to anxiety and depression in young people. For example fights with family or friends, changing schools or starting secondary school, being bullied and experiencing a relationship break-up, recent death, abuse or neglect. (National Health Services, 2020)

In all cases, it is important that depression is diagnosed and treated early and that the focus is on treatment, not just causes.

HOW IS DEPRESSION COMMONLY TREATED?

Fortunately, depression is a very treatable mental disorder. Around 80% to 90% of people who seek help with their symptoms of depression respond positively to treatment and find some relief from their symptoms. Diagnoses and/or a treatment should be conducted by a health professional. Person will get a thorough diagnostic evaluation, which also includes an interview and a physical examination. Additionally they might take blood tests to cross out the possibility for any other medical condition, for example a thyroid problem or vitamin deficiency. The medical evaluation, with the addition of exploring the medical and family history, cultural and environmental background, will help to identify specific symptoms and eventually getting a diagnosis and a suitable action plan for treatment. (American Psychiatric Association, 2020)

Ways of treatment:

- **Medication** – Most commonly a person with depression is prescribed antidepressants, because the brain chemistry may be the cause of an individual's depression. Improvements of such medication may come within a week or two, but full benefits may take as long as two to three months. At times improvements are not seen which may lead the patient's psychiatrist to change the dose of the medication or add or substitute another antidepressant. In some cases other psychotropic medications can be more beneficial. In both situations it is important to notify your doctor if a medication is not working or you are experiencing side effects
- **Therapy** – With mild depression psychotherapy is mostly used alone, but with moderate to severe depression antidepressant medication is usually added to be part of the treatment. Psychotherapy can be done individually, but if necessary it can include others. For example, family or couples therapy can help address issues within these close relationships. Group therapy is also a great way to bring people with similar illnesses together in a supportive environment, and gives the participant the chance to learn how others cope in similar situations. Cognitive behavioral therapy is a form of therapy where problem solving happens in the present and has also been found to be effective in treating a person with depression.

Particularly it has helped the person to recognize negative thinking and change their thought and behavioral patterns to take on life challenges with a more positive approach. Therapy treatment can take a few weeks or much longer depending on the severity of the depression.

- **Electroconvulsive Therapy (ECT)** – It has been used since the 1940s and is a medical treatment that is commonly used for patients with severe depression and who have not responded to other treatments. It involves a brief electrical stimulation of the brain while the patient is under anesthesia. Typically the patient receives ECT two to three times a week for a total of six to 12 treatments. It is usually managed by a team of trained medical professionals including a psychiatrist, an anesthesiologist and a nurse or physician assistant.
- **Self-help and Coping** – There are many ways how a person can help themselves to reduce the symptoms of depression. Getting enough sleep on a regular basis, eating a healthy diet and daily exercising helps to create more positive feelings and improves overall mood. Avoiding alcohol and other harmful substances also will help reduce symptoms of depression. (American Psychiatric Association, 2020)

OUTDOOR THERAPY IN DEPRESSION

Not so commonly known use of therapy is Ecotherapy, also known as nature therapy or green therapy. It is a practice that has come from ecopsychology, which was developed by Theodore Roszak. (Homburger, 2011) Ecotherapy believes that humans are part of the web of life, and our body, mind and soul is connected to the environment. This style of therapy helps individuals explore their relationship with nature, an area that in many types of psychotherapy has been separated from the healing process. (Adams, Hester & Bradley, 2013)

Many clinicians who practice ecotherapy believe in the connection of the earth and its many complex systems. They believe if a person can harmonize with these systems, they may experience improved mental health. Personal and planetary well-being are the main principles of ecotherapy and both are connected to one another. Therefore human lives are seen as part of a bigger system of earthly interaction. (Adams, Hester & Bradley, 2013)

There has been conducted research on the positive effects of nature to humans well-being. Psychologist Terry Hartig conducted a study where participants were asked to do a 40-minute long cognitive assignment to help induce mental fatigue. Three requirements were assigned to participants who were implementing the 40-minute task – either walk in a nature preserve, walk in an urban area or sit quietly while reading a magazine or listening to music. The ones who walked in the nature preserve reported feeling less anger and more positive emotions than the ones who did other requirements in the task. Another similar

study was conducted, where they found out that nature walk reduced depression symptoms in 71% of the participants and only 45% of those who took a walk through a shopping mall. Also recent studies have resulted that nature sounds, like birds chirping and tree leaves rustling, helped participants recover more quickly from psychological stress, rather than road traffic noise. (Good Therapy, 2018)

Several other studies have found as well that even a slight glimpse of nature from a window or photographs of nature can improve people's mood, mental health and overall satisfaction of life. Roger Ulrich conducted research where he viewed heart surgery patient's pictures of trees and water. It resulted in reducing their anxiety and need for pain medication. (Good Therapy, 2018)

Studies have shown how beneficial nature is for children. For example, children who live in buildings with a nearby green space may have a greater capacity to resist temptation, have better attention and impulse control, than children who live in buildings surrounded by concrete. Additionally, children diagnosed with attention-deficit hyperactivity show fewer symptoms when they have spent time outside in nature. Having animals around may reduce children's aggression and agitation as well. (Good Therapy, 2018)

ECOTHERAPY ACTIVITIES AND TECHNIQUES

There are many types of techniques and activities conducted in ecotherapy. Some may involve a therapist and are done in group settings, others need a more individual approach or done independently. Most sessions are done in nature settings, only few remain inside an office building. Some more common ecotherapy activities are described below:

- **Nature meditation:** This meditation takes place in a natural environment, like parks, beaches or in the woods. It can be done independently, but also in groups. Meditation's aim is to identify something in nature that catches participants' eye and they need to spend some time observing how this piece of nature relates to their life and what they can learn from it. When done in groups the findings are shared with the group at the end of the session.
- **Horticultural therapy:** This type of therapy includes plants and garden related activities, like planting seedling, digging soil, trimming leaves or weeding garden beds. It is recommended to use with people who are experiencing stress, burnout, and substance abuse. (Good Therapy, 2018)

For example, this spring in Estonia, the Tallinn Children's Home launched a project that creates green gardens, within that framework they created a senses garden to conduct educational activities and therapies for children with severe disabilities and

and who are living in the orphanage. The aim was to enrich their daily lives and to offer the children the opportunity to experience taking care of seedlings and taste the fruits of their own labor when the berries and fruits are ripe. (Scandium, 2021)

- **Animal-assisted therapy:** In this type of therapy animals are involved in the process of healing. It has been indicated that petting and playing with the dog, for example, reduces aggression and agitation.
- **Physical exercise in a natural environment:** Various physical activities done in nature, such as walking, jogging, cycling, or doing yoga. It will help people connect better with the natural world and feel more connected to earth, through that they reduce stress, anxiety, depression, and anger.
- **Involvement in conservation activities:** This activity is usually done in groups and the aim is to restore or conserve a natural environment. It helps to create a sense of belonging and connectedness between the group. Additionally creates a sense of purpose, hopefulness and overall mood improvement of the individual. (Good Therapy, 2018)

ESTONIAN NATURE AND ANIMAL THERAPY CENTER

In Estonia there is a center that offers high-level training on nature and animal therapy. They offer psychological services for children, young people and their families. Their aim is to help children and young people discover their natural talents with the help of professional specialists in a therapeutic environment that includes nature and animals.

They conduct nature and animal therapy basic and advanced trainings, involving the best specialists from Estonia and abroad as trainers. They also cooperate internationally in order to develop a new direction of therapy in Estonia using Estonia's own and natural resources - nature and animals. They bring together specialists from all over Estonia, giving them the opportunity to work in a uniquely created environment that lets them include the animals, birds and fish of the therapy center in their work. (Eesti Loodus - ja Loomateraapiakeskus, 2022)

CONCLUDING REMARKS

Although depression can affect anyone at any given time, some studies do suggest that a person is more likely to get depressed when they get older and live in difficult social and economic circumstances. Poverty and unemployment increases the risk of becoming depressed. As countries with low income are often absent or underdeveloped in providing people services or treatments for depression. Depression that is not treated may lead to suicide.

Depression negatively affects how we feel, think and act. Depression causes feelings of sadness and/or a loss of interest in activities we used to enjoy. It can lead to a variety of emotional and physical problems and can decrease our ability to function at work and at home. Fortunately, there are various ways to reduce or eliminate symptoms of depression. Most important is that a person would not let themselves get into a “downward spiral” and seek help as soon as they start seeing the first symptoms of depression arise.



**OBSESSIVE-COMPULSIVE
DISORDER (OCD)**

INTRODUCTION

Obsessive–compulsive disorder (OCD) is a phenomenon that around 1.1 – 1.8% of the world population suffers from. Females are more prone to suffer from OCD than males and certain ethnic minorities have an even higher chance of suffering from such condition. The situations and/or behaviors that people can be OCD on vary from person to person and also the strength or the urge of such behavior varies from person to person (Abramowitz et al, 2018)

DEFINITION OF OBSESSIVE–COMPULSIVE DISORDER (OCD)

Obsessive–compulsive disorder (OCD) is a typical anxiety disorder. It brings on irrational anxieties, worries, or ideas. Through rituals, an OCD sufferer attempts to control these thoughts Rasmussen & Eisen (1992). According to the DSM V the OCD is the “Recurrent and persistent desires, thoughts, or impulses that are felt as invasive and undesired at some point throughout the disturbance and that, for the majority of people, create pronounced anxiety or distress. These repetitive actions that an individual feels, come out as a result of the obsession that the person has that the norms must be enforced strictly. These norms vary from rituals such as handwashing, praying, checking that the house is locked before going out, to cleaning rituals and others. The intensity of how important these rituals are for the person also varies.

DIFFERENT TYPES OF OBSESSIVE–COMPULSIVE DISORDERS (OCD)

There are different types of OCD and what people focus on, however the most common themes or areas that the people have an OCD on are:

- **Organizational OCD:** This is most probably, the most recognizable form of OCD, as the action of the person suffering from such OCD can be easily seen. This type of OCD involves obsessions about things being in precisely the right place or symmetrical. For example, someone may feel the need to have a door fully open or half open, make all labels on cans in the pantry face outward, or keep everything on their desk completely neat. If the person doesn't perform the compulsions to make everything just right, they might experience distress or even thoughts that the lack of organization will cause some unrelated harm to them or their loved ones (Ahmed, 2021).

- **Contamination OCD:** Contamination OCD revolves around two general ideas. The first is the thought that people can spread non-viral illnesses through touch or proximity. The second is that everyday things, thoughts, and words can “contaminate” a person, making them feel unclean. People with this type often feel the need to wash their hands repeatedly and clean items frequently to avoid spreading the perceived contamination. They may fear making themselves or someone else ill from being careless, or they might feel disgusted and uncomfortable around “unclean” items, which can lead to avoidance of certain objects, people, or places (Ahmed, 2021).
- **Intrusive Thoughts:** People who experience intrusive thoughts have distressing and often abhorrent ideas pop into their heads seemingly at random. These obsessions can involve hurting a loved one, causing harm to a stranger, or even the idea that simply thinking about something can make it more likely to occur. To quiet these obsessions, a person might have to perform an action, such as saying something aloud or repeating something mentally. While people who experience intrusive obsessions may have violent or harmful thoughts, they neither agree with them nor do they act upon them. In fact, these ideas are so contradictory to how they feel that people often become distressed that their mind even created the thought in the first place. Some examples of the thoughts that these people might experience are thoughts or ideas like, “I could jump in front of the train right now”, “I could stab my husband with this knife”, “What if I drove into that person?”. Although these might sound exaggerated for some these are thoughts that come to the mind of some people. Then there are people who can easily shrug it off and others who find it very hard to do so (Jones et al 2018).
- **Ruminations:** This type has similarities with intrusive thought-based OCD, but there are some key differences. The ideas that get stuck in the head of someone with rumination-based OCD aren’t repulsive or distressing. Instead, they might be philosophical, religious, or metaphysical conundrums (essentially questions that have no proven answers). People who experience ruminations will be stuck on this topic for a while and might ignore responsibilities while they try to figure out an answer. Since these questions often have no definitive solution, people might feel unsatisfied or empty after thinking about this topic for so long (Ahmed, 2021).
- **Checking:** Checking is an obsession in which a person is concerned about causing damage or harm by being careless. Their compulsions might include checking doors to make sure they’re locked, stoves to make sure the burners are off, or their wallet to make sure their credit cards, IDs, and cash are all still there. They might have to check something multiple times or even stare at it for a period before they can feel more at ease (Ahmed, 2021).

As one could see there are different types of OCD behaviors. When it comes to subtypes of OCD, some people only have one subtype of OCD, but it is definitely common for people to have more than one (Veale & Roberts, 2014). Over time, the subtypes may change or stay the same. In some cases, there tends to be one specific type of OCD that presents itself throughout a person's life, with various symptoms changing over time. In other cases, people manifest different subtypes at different points in their lives. For example, "just right" OCD as a child, contamination OCD as an adolescent, and harm OCD as an adult.

In some cases, there tends to be one specific type of OCD that presents itself throughout a person's life, with various symptoms changing over time. The behavior associated with the OCD could also change. These changes in behavior usually occur due to changes in realities. For example, for people experiencing contamination OCD, arrival of COVID-19 brought in a new reality and also new challenges in their life (Veale & Roberts, 2014).

There's no research to show that certain subtypes of OCD necessarily carry stronger or more disruptive symptoms. OCD symptoms usually begin gradually, and they can grow over time, also varying according to the stages of your life and situations. For example, if you're very stressed, you're more likely to experience worse effects from your OCD.

FACTORS LEADING TO OCD

In spite of a range of theories and considerable research, scientists so far have not been able to identify a definitive cause for why a person develops obsessive-compulsive disorder (OCD). However, there are plenty of theories surrounding the potential causes of OCD, involving one of or a combination of either; neurobiological, genetic, learned behaviours, pregnancy, environmental factors or specific events that trigger the disorder in a specific individual at a particular point in time (Chakraborty & Karmakar, 2020). There have been many explanations of why people develop OCD. Some have argued that it is inherited, whilst others have said that life events can cause it. Others have suggested that it's caused by a chemical imbalance in the brain. Different people, different researchers find different explanations more helpful than others. But here's the point, we simply don't know! (Abramowitz et al, 2018). The following are some of the causes that lead to OCD:

- **Biological Factors:** Some mental health researchers was carried out on brain scans and similar. This has indicating that OCD is linked to a genetic or biological cause. This research is often described in terms of chemical imbalances in the brain, faulty brain circuitry or genetic defects. However, despite the recognition that certain parts of the brain are different in OCD sufferers, when compared with non-sufferers, it is still not known how these differences relate to the precise mechanisms of OCD. Brain imaging studies have consistently demonstrated differing blood flow patterns among people with OCD compared with controls, and the cortical and basal ganglia regions are most strongly implicated. However, subsequent meta-analysis studies found that differences

between people with OCD and healthy controls were found consistently only in the orbital gyrus and the head of the caudate nucleus. These areas of the brain become relevant and 'switched on' in particular environments where the person is worrying. It is therefore not surprising that there are brain activation differences between people with OCD and those without (Pauls, Abramovitch, Rauch & Geller, 2014).

- **PANDAS:** A 1998 finding implicated the basal ganglia as a key brain region in OCD with the discovery that in a sub-group of children with OCD the disorder may have been triggered by infections. Streptococcal infections trigger an immune response, which in some individuals generates antibodies that cross-react with the basal ganglia. The explanation was that some children begin to exhibit OCD symptoms after a severe strep throat infection. It is thought that the body's natural response to infection, the production of certain antibodies, when directed to parts of the brain might be linked in some way to Paediatric Autoimmune Neuropsychiatric Disorders associated with Streptococcal Infection (PANDAS). This mechanism may explain the subgroup of children in whom OCD develops after a streptococcal infection, and worsens with recurrent infections (Saxena, Brody, Schwartz & Baxter, 1998).
- **Genetic Related:** Overall, genetic studies indicate some tendency towards anxiety that runs in families, although this is probably only slight. Some research points to the likelihood that OCD sufferers will have a family member with OCD or with one of the other disorders in the OCD 'spectrum'. In 2001, a meta-analytic review reported that a person with OCD is 4 times more likely to have another family member with OCD than a person who does not have the disorder. This and other studies have raised the possibility of familial prevalence of OCD and led to a search to identify specific genetic factors that may be involved. However, despite a proliferation of studies, and dozens of potential gene candidates suggested, researchers have so far failed to identify a consistent candidate gene responsible for OCD (Ahmed, 2021).
- **Chemical Imbalance:** It's common to see and hear mental health professionals describing the cause of OCD in terms of a 'biochemical imbalance'. These approaches have focused on one particular neurotransmitter, serotonin. Serotonin is the chemical in the brain that sends messages between brain cells and it is thought to be involved in regulating everything from anxiety, to memory, to sleep. Researchers know that OCD is triggered by communication problems between the brain's deeper structures and the front part of the brain. These parts of the brain primarily use serotonin to communicate. Thus low levels of serotonin, can lead to having a problem in communicating between the different brain structures that leads to OCD (Milad & Rauch, 2012).
- **Stress:** Stress and parenting styles are environmental factors that have been blamed for causing OCD, but no evidence is yet to show that. Stress does not actually cause OCD, but major stresses or traumatic life events may precipitate the onset of OCD. However, these are not thought to cause OCD, but rather trigger it in someone already

predisposed to the disorder. If left untreated, everyday anxiety and stress in a person's life will worsen symptoms in OCD. Problems at school or work, university exam pressures and normal everyday problems that relationships can bring are all contributory factors to increasing the frequency and severity of a person's OCD (Jones et al 2018).

As one could see, there is a range of factors have been identified as contributing to the cause of OCD, and there is still a great deal of theoretical contention surrounding the definitive cause. However, despite most of the above theories offering compelling and highly informative insights, it's a possibility that a combination of the theories and a combination of factors, may eventually be identified as the actual cause of OCD and that it is likely that for any given person a number of factors are involved (Saxena, Brody, Schwartz & Baxter, 1998).

ACTIVITY TAKING PLACE IN THE BRAIN WITH OCD

According to Saxena et al. (2018), scientists are still unsure of the exact mechanisms underlying OCD, but one widely accepted theory postulates that circuits connecting the frontal cortex to a group of brain regions known as the basal ganglia may plays a major role. Research shows that OCD symptoms start with activity in the orbitofrontal cortex, OFC, a region of the frontal cortex. The OFC, which is located just above the orbits, has a variety of purposes, the majority of which are still not fully understood. However, research indicates that certain regions of the OFC become quite active when we detect anything perilous or hazardous in the environment (Milad & Rauch, 2012).

The circuits that link the OFC to the basal ganglia are activated once we detect a threat. The basal ganglia are primarily recognized for their function in movement, but they also play a number of cognitive and emotional roles. The encouragement of goal-directed activities, the formation of habitual responses, and changing to a new behavior when it is thought required are particularly dependent on them. The direct pathway, which promotes action, and the indirect pathway, which inhibits it, make up the two opposing pathways that make up the basal ganglia circuitry (Know your brain, 2022)

In a person that does not suffer from OCD, the OFC-basal ganglia would first spot anything potentially dangerous in the environment, and the OFC gets engaged in identifying it as a potential concern. For example, when the person touches a door handle in a public restroom, their risk of contracting a disease, icfreeses due to the fact that they touched this handle that could be contaminated. To start an activity to lessen the threat, the OFC communicates directly with the basal ganglia. As a result, the person uses a small amount of hand sanitizer or they wash their hand. The indirect pathway now takes over and prevents

further action. Once the person washes their hand the “worry” of the “threat” is over and is dealt with.

The OFC to basal ganglia route is frequently excessively excitable in people with OCD. Hyperawareness of potential threats in the environment is a trait of OCD patients, and it is associated with high levels of OFC activity. This when a person makes an activity to address the threat like washing their hands, the basal ganglia route stays active and thus the person still sees that issue or situation as a threat. As a result, people with OCD may perceive a threat not only when they touch a door handle in a public restroom, but also whenever they come into contact with a surface that hasn't been cleaned recently, even if it's a countertop at home (Menzies et al, 2008).

The excessive activation of the direct route is linked to this high alertness. The direct pathway triggers a prompt for the person to wash their hands. But the high level of activity in the direct pathway drowns out the inhibitory action of the indirect pathway, and the patient has a difficult time switching to a different behavior. Additionally, each time the threat is temporarily alleviated, the individual feels a transient sense of relief—which reinforces the response. All of this leads to compulsive behavior, and the hand-washing must be repeated a number of times before the person is satisfied (Pauls et al., 2014).

More information of this can be found on this video in the link below:

<https://www.youtube.com/watch?v=BJshegpcFv8>

YOUTH AND OCD

Although it can start in childhood, OCD typically manifests in adolescence or young adulthood. The onset of symptoms is typically gradual, and their intensity tends to change with time. One may encounter different kinds of obsessions and compulsions over time. In general, symptoms get worse when stress levels rise. OCD can have mild to moderate symptoms to be so intense and time-consuming that it becomes incapacitating. OCD is typically thought of as a lifelong condition.

SIGN AND SYMPTOMS FOR A PERSON WITH OCD

The signs and symptoms for a person with OCD may vary and be different from person to person mainly depending on the different types of things that people maybe be OCD about. Obsessions and compulsions are frequently present i people with obsessive-compulsive disorder (Bihari, Hill, & Murphy, 1991). However, it's also possible to merely have obsessive or compulsive symptoms. The obsessions and compulsions may or may not be severe or irrational, but they nonetheless consume a lot of time and prevent one from going about

your everyday activities and functioning in social, academic, or professional settings Chakraborty & Karmakar (2020).

OCD OBSESSIONS

When we talk about OCD obsession, we are referring to the repeated, persistent and unwanted thoughts, urges or images that are intrusive and cause distress or anxiety. One, might try to ignore them or get rid of them by performing a compulsive behavior or ritual. These obsessions typically intrude the thoughts of someone and also intrudes the daily, life activities of a person (Pauls, Abramovitch, Rauch & Geller, 2014).

Obsessions frequently have underlying themes, such as:

- Aversion to dirt or contamination
- Having doubts and finding it difficult to accept ambiguity
- Requiring symmetry and order in everything
- Ideas that are violent or horrifying about losing control and hurting oneself or others
- Unwanted ideas, such as those that are hostile or deal with sexual or religious issues

COMPULSIONS

OCD compulsions are repetitive behaviors that you feel driven to perform. These repetitive behaviors or mental acts are meant to reduce anxiety related to your obsessions or prevent something bad from happening. However, engaging in the compulsions brings no pleasure and may offer only a temporary relief from anxiety.

When one is experiencing obsessive thoughts, one can create rules or rituals that they must adhere to in order to manage their anxiety. These obsessions are excessive and frequently have no connection to the issue they are meant to solve.

Compulsions frequently have themes, similar to obsessions, such as:

- Cleaning and washing
- Checking\Counting\Orderliness
- Maintaining a rigorous schedule
- Requesting assurance

Compulsion symptoms and indicators examples include:

- Scrubbing ones hands until they are raw
- Repeatedly ensuring that the doors are locked
- Repeatedly ensuring that the stove is off

- Using certain patterns to count
- Repeating a word, phrase, or a prayer out loud

COMPLICATIONS CAUSED

Obsessive–compulsive disorder can cause a variety of issues. Some of these issues are indirectly caused due to the actions that happen because of the OCD that the person has. Some of these complications are:

- Too much time spent performing ritualistic actions
- Difficulties with one's health, such as contact dermatitis from excessive hand washing
- Difficulty attending work, school or social activities, as the OCD interferes with your daily life activities.
- Troubled relationships due to arguments that may come up from the fact that the partner might not understand why someone might be reacting in a certain way or asking certain things that may look as “too much” for a person, like being too strict where things are put or too strict with cleaning etc (Milad & Rauch, 2012).

MEDICINES AND THERAPIES

OCD is regularly treated with medicine, psychotherapy, or a combination of the two.

Despite the fact that the majority of OCD patients respond to treatment, a small percentage of people continue to experience symptoms. Other mental clutters, such as unease, sadness, and bodily dysmorphic clutter—where someone mistakenly agrees that a specific aspect of their body is unusual—can also exist in OCD sufferers from time to time. When making decisions about treatment, it is crucial to take these additional clutters into account.

The obsessions and compulsions of OCD can be controlled with the aid of specific psychiatric medication. Antidepressants are typically used initially. Other medications have been used to treat OCD, but more research is needed to show the benefit of these options.

PSYCHOTHERAPY

Psychotherapy can be a viable treatment for grown-ups and children with OCD. It appears that certain sorts of psychotherapy, counting cognitive behavior treatment (CBT) and other related treatments (e.g., propensity inversion preparation) can be as viable as medicine for numerous people (Milad & Rauch, 2012). As part of CBT therapy, exposure and response prevention (ERP) entails gradually exposing one person to a feared object or fixation, like dirt, and teaching him/her how to manage the temptation to carry out his/her compulsive rituals. ERP requires work and practice, but once one person learns to control his/hers

compulsions and obsessions, he/she might experience a higher quality of life (Ahmed, 2021).

As with most mental health conditions, treatment is ordinarily personalized and might start with either medicine or psychotherapy, or with a combination of both (Milad & Rauch, 2012).

OTHER TREATMENTS

- Programs for intensive outpatient and inpatient therapy

People with OCD who struggle to function due to the severity of their symptoms may benefit from comprehensive treatment programs that empathize ERP therapy concepts. These courses usually run for several weeks.

- Deep brain stimulation (DBS)

For persons 18 years of age and older with OCD who don't respond to conventional treatment modalities, the FDA (The United States Food and Drug Administration – federal agency of the Department of Health and Human Services) has approved DBS. DBS entails implanting electrodes in certain brain regions. Electrical impulses generated by these electrodes may help control aberrant impulses.

- Transcranial magnetic stimulation (TMS)

When conventional therapy methods have failed to control OCD in adults aged 22 to 68, the FDA approved a specialized device Brains Way Deep Transcranial Magnetic Stimulation). TMS is a noninvasive treatment for OCD symptoms that stimulates brain nerve cells with magnetic fields. An electromagnetic coil is applied to the scalp near the forehead during a TMS session. The brain's nerve cells are stimulated by a magnetic pulse delivered by the electromagnet (Mayo Clinic, 2020).

OUTDOOR FOR PEOPLE WITH OCD

Increasing the amount of time, you spend in nature is often recommended for better health. Work out and outdoor activities may cause the discharge of “growth factors,” which trigger neurons to form modern associations. These modern associations may offer assistance to diminish side effects of OCD. Work out moreover advances the discharge of endorphins, “feel good” neurochemicals, boosting temperament and fighting off push.

Further research found on the usage of outdoor activities on people with OCD.

CLOSING REMARKS

Everybody experiences unease, which is actually our body's typical response to stretching or testing our limits. It could be triggered by a variety of situations, such as having to make a crucial decision, getting ready for a test, or meeting someone new. In case someone has an anxiety disorder like OCD, with receiving the appropriate treatment, he /she can deal with the side effects that could interfere with relationships, performance at work or in school, and even basic functions if left untreated. Thankfully, someone's potential does not need to be limited by an OCD determination. Many people successfully overcome their OCD and lead normal, fulfilling lives. There is confidence if you or a loved one has been diagnosed with OCD.



**SELF-HARM AND SUICIDE
IN YOUTHS**

INTRODUCTION

As with any illness, anyone can experience difficulties with their mental health. Unfortunately, due to the stigma surrounding the issue, many individuals, including youths may be reluctant to reach out for help, and this may further deteriorate their mental well-being. This research will be focusing primarily on self-harm and suicide. The author will explore the biological components, the etiology, how it affects the development of the adolescent and lastly, the treatment options available.

DEFINITIONS

Throughout this research, the author will be making references to two behaviors: non-suicidal self-injury (NSSI) and suicide. The term NSSI refers to any intentional act that causes harm to one's own body without the intent of ending one's life (Nock, 2009). There are several types of NSSI, such as cutting, burning, scratching and banging. The word 'intention' is key in that definition, because the individual engages in this behavior without intending to end their life.

On the other hand, suicide is defined as death caused by injuring oneself with the intent to die (Crosby, Ortega and Melanson, 2011). Although persons who engage in NSSI do not aim to end their lives, studies have indicated that those who engage in NSSI before the age of 18 are more likely to attempt suicide later in life (Chesin et al., 2017).

CAUSES

Although there is no single 'cause' for suicide, there are a number of risk factors that, when present, increase the likelihood of the individual dying by suicide. These factors include a past history of suicide attempts, engaging in NSSI, family members dying by suicide, suffering from mental illness, experiencing adverse childhood experience such as abuse and neglect, alcohol and substance abuse and experiencing a loss in life (Center for Disease Control and Prevention, 2020).

MIDDLE-AGED MEN

Interestingly, research has shown that middle-aged men are more likely than any other demographic to die by suicide (Samaritans, 2021), and the Samaritans (2012) investigated this phenomenon and identified several key factors which shall be further explored. The first key factor is 'masculinity' – we must not overlook the presence of stigma surrounding mental health in the community, and boys are often told to "man up" from a young age.

Although this appears to be a harmless phrase, it has several implications. Later in life, when the struggling adult feels distressed or suffers from a mental illness, they may feel weak and out of control, further discouraging them from seeking help.

Another important factor is going through a breakup. Males often find themselves without emotional support when a relationship ends, as they rely solely on their partners for it. Furthermore, in situations involving children, men are more likely to be separated from them. In this scenario, the male would have lost, not only their relationship, but also regular contact with their child, which has been found to be detrimental and a risk factor in this study. The socioeconomic status of an individual is also important. As a person's socioeconomic status declines, the risk of suicide rises. Men with low-paying jobs, little or no education, and housing problems are more likely to die by suicide (Office for National Statistics, 2018).

Another factor that contributes to an increased chance of suicide in middle aged men, is this "middle age phase" itself as this is usually a stressful time in one's life. This tends to happen because at this time of life, people are expected to be settled (in terms of employment and marriage) at this point in their lives, those who are struggling in these areas are more likely to consider suicide. Furthermore, it has been discovered that one's subjective well-being decreases during this time in life (Samaritans, 2012)

MINORITIES

Individuals who are members of a minority group are more likely to have suicidal thoughts and die by suicide (Stephenson et al., 2019). We must recognize that adolescence is a period of identity formation, which includes sexual and gender formation. Members of the LGBTIQ+ community have a higher risk of attempting suicide (Ivey-Stephenson, Demissie, & Crosby, 2019).

Social rejection is most certainly a risk factor, and this is further corroborated in two research studies that focused on two other minority groups: people with disabilities and people of different ethnicities. The former was carried out by researchers Marlow et al., (2021); the authors discovered a direct correlation between living with a disability and death by suicide. The latter was conducted by Ramchand, Gordon and Pearson (2021). Similarly, the authors found that Black, Asian and Pacific Islander youths are at a higher risk of dying by suicide.

The importance of feeling accepted and welcomed in a community is reaffirmed by these research findings. It is critical to be aware of the cultures and identities of others. It is even more important to be accepting of individuals who form part of minority groups.

SUICIDE IN YOUTH

In 2021, it was reported by UNICEF that suicide is the second leading cause of death among the youths. The statistics further show that in Europe, three adolescents lose their life to suicide every single day. This alarming statistic makes suicide the second leading cause of death in youths. Naturally, suicide is a complex phenomenon and as we shall explore further, there is no single cause. With that being said, mental illness amongst youths is on the rise as it is estimated that a staggering nine million adolescents (between the ages of 10 and 19) suffer from mental illness, with anxiety and depression being the most prevalent (UNICEF, 2021). We must also keep in mind that young adults rely heavily on interpersonal relationships, and the COVID-19 pandemic has put an additional strain on their development over the last three years. As a matter of fact, many youths have stated that the pandemic had a significant impact on their mental health (UNICEF, 2021).

WHAT TAKES PLACE IN THE BRAIN?

When talking about the etiology of mental health disorders, we must always consider the interplay between all the different organic and psychosocial factors. In this part of the research, we shall be focusing on the biological part of mental illness. Given that NSSI and suicide are often present when the individual is struggling with depression, the research presented in this research will help us better understand what happens in the brain when an individual engages in NSSI or dies by suicide.

Over time, advancements in brain scanning and imaging technology have allowed us to gain a better understanding of the chemicals and structural changes that occur in the brain.

NEUROTRANSMITTERS

It has become readily accepted within the medical field that there is a biological component to mental illness, and decades of research has proven this. When an individual is struggling with symptoms of depression, several research studies have found that it is partially due to low levels of serotonin, dopamine and norepinephrine (Lin et al., 2014), (Belujon and Grace, 2017).

Apart from these three key neurotransmitters, the hormone cortisol also contributes to depressive symptoms. People suffering from depression have abnormal activity in their hypothalamic-pituitary-adrenal axis (HPA) (Kunugi, 2010). When this structure is dysfunctional, it releases cortisol into the brain on a regular basis, affecting the body's stress response. The structure and neuroplasticity of the brain are affected by the continuous release of this hormone.

THE AMYGDALA, HIPPOCAMPUS AND CORTICES

Individuals who engage in NSSI or die by suicide do so naturally as a result of the overwhelming negative emotions they are experiencing. Individuals who are experiencing intense emotions frequently resort to self-destructive behaviors, as we will see later in this research. Furthermore, if the feeling of helplessness and hopelessness persists, the person might consider suicide as they see death as the only way out of this misery that they are enduring.

From a structural standpoint, the amygdala is mainly responsible for emotions and emotional behavior, and researchers have found that individuals who struggle with NSSI have abnormal activity in this area. Plener et al., (2012) investigated this further and discovered that people who engage in NSSI have higher activity in the amygdala, anterior cingulate cortex (ACO), and orbital frontal cortex (OFC). The heightened activity in these regions indicate that the individual struggles to process their emotions effectively.

Moreover, the hippocampus, which is responsible for memory retrieval has also shown to be over-active. Given this finding, the authors suggested that the individual experiences an automatic retrieval of an emotional memory which further intensifies and heightens their emotions.

THE FRONTAL LOBE

The final study we'll look at is the link between the amygdala and the frontal lobe, which is in charge of higher-level thinking, decision-making, and impulsivity. All of these qualities are necessary for dealing with emotions effectively and healthily. The study conducted by Banks et al., (2007) showed that there is a poor connection between the amygdala and the frontal lobe. When the individual's poor connection is combined with an overactive amygdala, they struggle with decision-making and impulsivity, frequently resorting to NSSI.

These biological findings are integral in our study on mental health as they show that there is truly a biological aspect to it. These studies shed light on how the individual who engages in NSSI is unable to regulate their emotions effectively. Although NSSI may seem counter-productive and ineffective to some, it is a coping mechanism and has a function to many. When the individual is experiencing heightened emotions, the self-destructive behavior produces a soothing effect, which induces feelings of calmness and relief (Klonsky, Victor and Saffer, 2014). Apart from that, while there may be a variety of reasons why an individual may self-harm, one of the most common reasons is self-directed anger, punishing oneself, and being overly critical of oneself (Hasking, Whitlock, & Rose , 2017).

HOW IT AFFECTS THE DEVELOPMENT OF A YOUNG PERSON

Young adulthood is a critical part of everyone's life. It is the transitory period between childhood and adulthood, during which there are physiological and psychological changes. It is also the period when the individual starts forming their identity. Many times, the experiences we face in young adulthood shape our future, and it is for this reason why it is so important for young adults who are struggling with their mental health to seek help.

In this part of the research we shall focus on how NSSI and suicide affect the development of the young person. Unfortunately, suicide is the ultimate and final symptom of depression, which is why it is so vital for individuals and young adults to reach out for help if they are struggling with their mental health. When it comes to NSSI, it must be reiterated that individuals who engage in NSSI prior to the age of 18 are more likely to die by suicide in their adulthood (Chesin et al., 2017).

Making friends and going out are important aspects of young adulthood for some, and this is an important part of one's personal development. Individuals gain independence and form important interpersonal relationships in their lives as a result of these experiences. However, youths who engage in NSSI often yearn for solitude and isolation (Endo et al., 2017). While their peers in their age group are out socializing, the individual may withdraw to their bedroom and engage in NSSI while dealing with the intensity of their emotions.

Furthermore, even from a biological standpoint, isolation is linked to high levels of anxiety and depression, both of which result in elevated cortisol levels in the brain (Almeida et al., 2017). Cortisol is linked to stress, as previously stated in this research, and when the body is exposed to constant cortisol levels, it can affect a young adult's cognitive development.

TREATMENT OPTIONS

Although this research has focused on the seriousness of NSSI and suicide, it is important to remember that there are a number of treatment options that have been shown to be effective. The ultimate goal is to assist the individual in replacing NSSI with other coping mechanisms in order to avoid suicide deaths as much as possible.

PSYCHOTHERAPY

NSSI can be a symptom of several mental health disorders, and research studies have continuously found psychotherapy to be a very effective treatment option (American Psychological Association, 2012). Psychotherapy has been proven to reduce disability, morbidity as well as psychiatric hospitalizations, as the individual becomes better equipped to deal with their emotions and learns how to regulate themselves more effectively. Although medication is sometimes necessary, research has shown that the effects of psychotherapy are more long-lasting than psychopharmacological treatments. Even when medication is used, it is more effective when used in conjunction with therapy.

PSYCHOPHARMACOLOGY

Depression and other mental health disorders can be treated with psychiatric medication. Given the chemical imbalance discussed earlier in this research, psychiatric medications known as Selective Serotonin Reuptake Inhibitors (SSRIs) work by limiting serotonin reuptake in the pre-synaptic nerve, increasing serotonin levels and thus alleviating depression symptoms (Elmaghraby, Nobari, & Cullen, 2019).

EXERCISE

Exercise can also help to alleviate depressive symptoms (Malhi et al., 2020). When you exercise, your brain's serotonin levels rise, and endorphins, which have mood-lifting properties, are released (Powell, 2018).

SLEEP

Sleep disruption is a symptom of depression and other mental health disorders, and the two are linked. As a result, good sleep hygiene is critical to one's mental well-being (Franzen and Buysse, 2008).

THE OUTDOORS

We must also consider the advantages of spending time outside. Connecting with nature and your surroundings has been shown to be an emotional well-being protective factor (Huyhn et al., 2013). Furthermore, according to Bratman (2015), spending time outside helps to reduce ruminating thoughts. Because high activity in the subgenual prefrontal cortex has been linked to depression symptoms (Coryell, 2005), spending time in nature has been shown to reduce neural activity in this area.

CONCLUDING REMARKS

The seriousness of NSSI must not be taken lightly, and it is for this reason that mental health professionals must always treat them with the seriousness they deserve. NSSI affects the individual's life tremendously, but effective treatment options do exist and are available.

Suicide is a tragic death, and we must acknowledge the individual's mental state when it occurs. For every person that is lost to suicide, a whole network of family and friends are left grieving the loss, and therefore prevention is key. Providing young people with information and access to support are two fundamental actions we need to implement to work towards more immediate support before it is too late.



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