

How to survive ADHD without medication and usefulness of social media

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ABSTRACT

The research I am currently working on aims to create a social change and liberation for the people between the age of 18 and 27 years old in the Netherlands who want and are capable of living without or less medication according to the severeness of their level of Attention Deficit Hyperactivity Disorder (further will be mentioned as ADHD).

The overall goal of this research is to create more awareness of the way to live without ADHD medication and how to use social media to share the knowledge of this research and create a social change to liberate people who want to live without ADHD medication.

The research methods compare the literature review and knowledge from the sample groups. The knowledge gained from the sample group was collected through surveys and interviews. Interpretative phenomenological analysis is used to analyse.

The main findings are:

- Society has a significant influence on people with ADHD negatively and positively.
- Medication could be liberating but also have many side effects that are not beneficial.
- Lifestyle interventions could help by liberation people from medication or being on less medication.

In conclusion, there is definitely a need to do more research on how to help people with ADHD in a better way and not only reduce it.

1. INTRODUCTION

This thesis considers the field of Attention Deficit Hyperactivity Disorder as the main subject of its study. The DSM-5 defines ADHD as

“a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development (American Psychiatric Association, 2013).”

Smith wrote in 2017 about the fact that the rate of people with ADHD on the global rate is 5.29%. Suppose you consider that there are 7.8 billion people around the world. This means that around 4 million people are diagnosed with ADHD around the world. In the last couple of years, the community online started to grow in creating awareness about life with ADHD and medication. However, how to live without medication has rarely been studied directly. Therefore, it is helpful to research how people live without medication and how we could create more awareness while using social media.

“Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. (Global Definition of Social Work, n.d.).”

This research aims to create a social change and liberate the people who want to live without medication if this is possible according to the severity of their ADHD. In the Appendices there, you will find a list of tips and tricks for steps a person with ADHD could take and what the healthcare system and society could change according to the findings.

2. REVIEW OF LITERATURE

Nowadays we find a lot of information about creating awareness for ADHD but if you dive into the information, you will find that there are some articles about how to live without medication but the awareness for living without medication is not as big as needed. The article “Why is ADHD awareness important?” is connected to this research because it first mentions that there is awareness about the topic but not about the lifestyle and how it affects people. The article is based on multiple research papers on ADHD. It also describes how it helps to dispel myths about people with ADHD and creates more support and access to treatment.

Villines (2021) has mentioned support and treatment; he also described that ADHD is a choice or a behavioural problem, according to doctors, and because of the connection between big pharma and doctors, there are more children over diagnosed, and there are more prescribed medications.

The article has also written about the fact that doctors overprescribe medication to youngsters. This is an interesting fact. Could doctors working with big pharmaceutical companies and earning money prescribe medication to youngsters?

In the article “Meditation or Medication?” They explained the costs of medication and how we could use meditation instead.

“It has been demonstrated that children and adolescents diagnosed with ADHD have a substantial economic impact on society [2–5]. A meta-analysis [2] reviewed seven European-based studies and found that the average total annual costs related to childhood ADHD lie between €9,860 and €14,483 per patient, and national annual costs ranged from €1,041 to €1,529 million (Meppelink et al., 2016).”

Could this be an answer to the question Villines was questioning himself? Could they over prescribe medication because of maintaining society in the way it is right now? Or could the change take too much money to go from a society with medication to a combined society? In this research, we will look more deeply into these articles.

2.1 HISTORY OF ADHD, THE MEDICATION AND TREATMENT PLANS

2.1.1 THE HISTORY OF ADHD

Wolraich et al (2019) describe those behavioural interventions focused on behaviour modification, such as parent behaviour-management training and school behaviour-management programs, have also long been demonstrated to be efficacious," according to ADHD Diagnosis and Treatment Guidelines: A Historical Perspective.

History of ADHD goes back to 1798.

According to Crichton, the illness "generally diminishes with age." Crichton, 1798. It was common until the 1990s Barkley 2006 to believe that ADHD is a childhood disorder that affected children "grow out" of it during puberty, as Lange et al. wrote in 2010.

A hyperkinetic disease of infancy satisfies two extra DSM-IV criteria in addition to meeting all three of the primary symptoms of ADHD. Precisely, their characterization of motor symptoms aligns very well with the existing classification schemes, as Lange et al. wrote in 2010, according to the research from Kramer and Pollnow.

In the years that came afterwards, the opinion that it is a childhood disorder changed to the fact that it is not only a childhood disorder.

A well-known allegory for kids with ADHD is "Fidgety Phil," also known as "Zappelphilipp," illustrated by Heinrich Hoffmann, a German physician, in 1844.

Hoffmann may have reported observations of noticeable behaviour without considering diagnosing a disorder because the symptoms of hyperactivity and inattention were not yet recognized as signs of a mental illness. Due to the brief nature of Fidgety Phil's story and the lack of sufficient behavioural features to meet the diagnostic criteria for ADHD, it is impossible to determine whether or not Hoffmann's account of a case of ADHD in the early nineteenth

century is accurate. Nevertheless, Fidgety Phil has come to be recognized as an allegory for ADHD, as Lange et al., (2010) described.

This was the early history of ADHD because Still was the first person to consider ADHD as a disorder.

Still asserts that mentally disabled children frequently exhibit poor moral control as a morbidity. Still 1902, p. 1008 notes that "there are other cases which cannot be included in this category" and that these cases, particularly, "call for careful observation." They consist of the cases that are thought to be historical accounts of ADHD, i.e., children who lack a "general impairment of intellect" but have a moral control defect. Children with a "morbidity defect of moral control associated with physical disease" such as meningitis, cerebral tumour, head injury, epilepsy, or children with a "defect of moral control" and typhoid fever. The other group into which Still divides these cases.

In the years following a lot of research has been done. It is still considered in the way that Still was seeing it, but the knowledge became broader.

2.1.2 MEDICATION

The medication for ADHD also has history dating back to 1937.

Bradley began a systematic trial with thirty of his hospital's young patients and saw remarkable behavioural changes. "The remarkably improved academic performance of approximately half the children was the most spectacular change in behaviour brought about by using Benzedrine". Gross (1995) figured out that children were more engaged in their work, completing it faster and more precisely. Furthermore, children who likewise became less interested in their surroundings but instead became emotionally tame. Typically showed some decrease in motor activity. Lange and Associates wrote down (2010).

These findings were the way to what we now still use as medication.

Leandro Panizzon created the compound for the first time in 1944, and Ciba-Geigy Pharmaceutical Company began selling it as "Ritalin" in 1954. According to Rothenberger and Neumärker (2005), the name "Ritalin" is derived from the first name of Panizzon's wife,

Marguerite, or "Rita." According to Leonard et al. (2004), p. 151, methylphenidate is "a piperazine—substituted phenylisopropylamine that is traditionally related to amphetamine." It was first used to treat a variety of conditions, including chronic fatigue, lethargy, depressive states, disturbed senile behaviour, and psychosis linked to narcolepsy and depression. But its most striking result has been a decrease in ADHD symptoms Lange et al. (2010).

During the years also new medication was created but more about that in chapter 2. Nowadays, methylphenidate is thought to be the most successful psychostimulant and is the medication that is prescribed for ADHD the most, according to Lange et al. in 2010.

2.2 COUNTRIES AND TRIBE'S APPROACHES TO ADHD

Smith (2017) wrote about different countries. Moreover, each country's history of ADHD paints a hugely different picture. These histories—which are only briefly discussed here—show that ADHD has historically been a much more flexible and mutable phenomenon, one that has been rejected as frequently as it has been accepted. This contrasts with the idea that ADHD is a fundamental and universal disorder that is hermetically encapsulated in a DSM diagnosis and present in 5.29 per cent of children worldwide. Furthermore, there has always been a lovely tale to explain why this has been the case, just like in any history. Investigating these regional and national histories is crucial for historians, who can then challenge the notion that ADHD is a universally recognized disorder.

According to the statement above there is a global presentation of ADHD but still around the world the picture could be slightly different.

According to Faraone (2003) Up to one in twenty children in America suffer from attention-deficit/hyperactivity disorder (ADHD), a behavioural disorder. The perception that ADHD is primarily an American disorder and is much less common elsewhere stems from the dominance of American research into this disorder over the past 40 years.

So, could we consider the fact that ADHD is more prevalent in America than elsewhere?

According to other researchers this is not true.

Taylor examined this matter by comparing factor analyses for seven distinct studies involving children from the United Kingdom, Canada, New Zealand, United States of America, and Australia. He discovered that, in contrast to antisocial behaviours like defiance and aggression, all studies' descriptions of being restless and easily distracted formed a coherent factor corresponding to hyperactivity. The scores obtained from the various studies on this hyperactivity factor were found to be comparable when compared to each other across the seven studies. as Faraone (2003) has written down.

The researchers above stated that ADHD is more antisocial behaviours but are there also positive sides of ADHD?

Would it be different in North Kenya for example?

The study focused on the Ariaal, a traditional cattle-herding people group in northern Kenya. Benjamin Campbell, a visiting assistant professor of anthropology at the University of Wisconsin-Milwaukee, oversaw the fieldwork and worked with Eisenberg. Eisenberg and his colleagues examined the relationships between height and body mass index (BMI) using the dopamine receptor genes DRD4 and DRD2. One of the chemical messengers used by the brain, dopamine, has a receptor that is encoded by the DRD4 gene. Eisenberg stated, "This gene is likely involved in impulsivity, reward anticipation, and addiction as was mentioned by Fellman (2008)

Eisenberg stated and it was described by Fellman (2008) that the DRD4/7R allele has been connected to increased food and drug cravings, novelty seeking, and symptoms of ADHD. The same tendencies might be less helpful in settled pursuits like concentrating on school, farming, or selling goods. However, a boy with this allele might be better able to defend livestock against raiders or locate food and water sources in a nomadic setting .

According to this research ADHD could be important to people who need to protect themselves and their food or community, for example the nomadic boy.

ADHD could be useful in certain situations and useless in other situations.

Konner connected in 2013 that a mismatch between human evolution and our contemporary surroundings is said to be the cause of what some experts refer to as ADHD, calling it a "disease of civilization." For example, while high energy levels may have been necessary for a hunter-gatherer, they are detrimental in a contemporary classroom.

According to Konner the people with ADHD are just seen as a mismatch by society. Society could have a big influence on the definition and the way of how people with ADHD are treated and welcomed into society.

2.3 COMMON EFFECTS OF MEDICATION

2.3.1 DIFFERENT KIND OF MEDICATIONS

Medications that are mostly used for people with ADHD are stimulants. The most used medications are Adderall XR, Vyvanse, and Concerta.

On the other hand, MNT Medical Network (2022) describes non-stimulant medications like Strattera or Intuniv XR as an option. The effects of medications can be short-, medium-, or long-acting.

A person's optimal medication is dependent on numerous factors. These consist of the adverse effects of the drug, its duration, and the patient's particular preferences. Although a physician can guide the optimal kind, it is essential and beneficial to understand the advantages and disadvantages of each kind.

2.3.2 DIFFERENT EFFECTS

In terms of ADHD medication, Meppelink et al. (2016) describes psychostimulants particularly methylphenidate as the most prescribed medications worldwide and have been used more frequently since the 1990s. In 2013, the world's methylphenidate consumption was estimated at 72 tons or 2.4 billion defined daily doses for statistical purposes. Over time, the US has had the highest methylphenidate consumption. However, since 2000, methylphenidate has sharply increased in many other countries, such as the Netherlands. In 2012, 130,000 children in the Netherlands used methylphenidate or 3.2% of all children in the country.

The majority of methylphenidate users in 2014 were children with ADHD who were between the ages of 11 and 14; out of 1000 children with ADHD in this age range, over 70 used methylphenidates. Approximately two-thirds of children with ADHD and one-third of children with ADD are on medication, even though the number of diagnoses in the Netherlands has increased over time, leading to a corresponding rise in the use of medication.

Medication comes with positive and negative effects. The positive effect is that it helps a person to function. In this chapter you will read the most common negative side effects of the most common medication.

Adderall XR

- *“signs of heart problems--chest pain, trouble breathing, feeling like you might pass out,*
- *signs of psychosis--hallucinations (seeing or hearing things that are not real), new behaviour problems, aggression, hostility, paranoia,*
- *signs of circulation problems--numbness, pain, cold feeling, unexplained wounds, or skin colour changes (pale, red, or blue appearance) in your fingers or toes,*
- *A seizure (convulsions),*
- *Muscle twitches (tics); or,*
- *Changes in your vision.*

Common side effects of Adderall XR may include,

- *stomach pain, nausea, loss of appetite,*
- *Weight loss,*
- *mood changes, feeling nervous or irritable,*
- *Fast heart rate,*
- *Headache, dizziness,*
- *Sleep problems (insomnia); or,*
- *Dry mouth (Multum, 2023). ”*

Vyvanse

- *“loss of appetite or decreased appetite,*
- *Anxiety,*
- *Weight loss,*
- *Diarrhea,*
- *Dizziness,*
- *Insomnia (trouble sleeping).*

Mild side effects that have been reported with Vyvanse include:

- *loss of appetite or decreased appetite,*
- *Dry mouth,*
- *Anxiety,*
- *Abdominal (belly) pain,*
- *Increased heart rate,*
- *Constipation,*
- *Diarrhea,*
- *Irritability,*
- *Dizziness,*
- *Feeling jittery,*
- *Headache,*
- *Nausea and vomiting,*
- *Weight loss,*

- *Sleep problems (Mba, 2023). ”*

Concerta

“Possible side effects of Concerta include:

- *Trouble sleeping,*
- *Headaches,*
- *Decreased appetite,*
- *Congestion and throat pain,*
- *Fever,*
- *Anxiety or nervousness,*
- *Dizziness,*
- *Stomachaches or diarrhea,*
- *twitching and tics, especially with long-term use,*
- *vomiting (Everything You Need to Know About Concerta, 2019). “*

Strattera

“Mild side effects that have been reported with Strattera include:

- *Dry mouth,*
- *Decreased appetite,*
- *Dizziness,*
- *Erectile dysfunction,*
- *Insomnia,*
- *Fatigue,*
- *Increase in blood pressure,*
- *Increased heart rate,*
- *Drowsiness,*
- *Nausea,*
- *Constipation,*

- *Mild allergic reaction.*

Serious side effects that have been reported and their symptoms include:

- *Mood changes. Symptoms can include:*
 - *Hallucination,*
 - *Anger or aggression,*
 - *Depression.*
- *Liver problems. Symptoms can include:*
 - *Itching,*
 - *Dark urine,*
 - *Jaundice.*
- *Heart problems, such as heart attack or stroke. Symptoms can include:*
 - *Changes in blood pressure,*
 - *Increased heart rate,*
 - *Fainting.*
- *Urinary problems. Symptoms can include:*
 - *Difficulty urinating,*
 - *Difficulty emptying the bladder.*
- *Priapism (an erection that does not go away). Symptoms can include:*
 - *erection lasting 4 hours or more,*
 - *Penile pain and discomfort,*
- *Risk of suicidal thoughts in children and adolescents,**
- *Severe allergic reaction (J. M. W. PharmD, 2023). ”*

Intuniv XR

“As with all medications, guanfacine can cause side effects. The most common side effects include:

- *Sleepiness,*
- *Headaches,*
- *Fatigue,*
- *sedation, which is dose-dependent and temporary.*

Other side effects, many of which are dose-dependent, include:

- *Nausea,*
- *Lethargy,*
- *Low blood pressure,*
- *Insomnia,*
- *Dizziness,*
- *Abdominal pain,*
- *Irritability,*
- *Decreased appetite,*
- *Dry mouth constipation (Galan, 2023)."*

Medication is necessary to take if you cannot live a normal life without it.

Always consider the fact that the side effects mentioned above could cause situations that could create more problems.

In the next two chapters we will dive deeper into how to handle ADHD without the use of medication.

2.3.3 THE POSITIVE EFFECTS OF MEDICATION

The positive effects of the medications as known by the general population is that people are more likely to focus better and behave like society is expecting.

Villines (2021) wrote in his article “Why is ADHD awareness important” that 75-80% of children with ADHD will benefit from taking stimulant medications.

The effect of ADHD medications will reduce the symptoms but also create fewer difficulties at work, better relationships, and improve academic performance.

According to Villines (2021) it will also reduce the risks of suicide, lowering the rate of substance- related events and lowering the rates of criminality.

The positive sides of the medication are beneficial but on the other hand every positive thing has a negative side as well.

2.3.4 THE ADVERSE EFFECTS OF MEDICATION

The negative effects of medications could be according to Villines (2021) that you could sleep disturbance ,experience a lack of appetite, and tics. These side effects will wave away when you stop with the medication.

However, the most shocking information, according to Villines (2021), is the stunt or slow growth if children take medication too long the chance that they will not accelerate their growth.

Also, anxiety become a big problem according to several research as describe in the article “ what are the long terms effects of ADHD medication”

Medication has a big effect on your brain, growth, and behaviour.

2.4 EFFECTS OF NORMAL DAILY USED PRODUCTS

Nutrition has a big effect on your body and brain.

Konstantinovsky described in 2017 that what is beneficial for the brain is probably beneficial for ADHD, according to experts. Perhaps you should eat:

A diet heavy in protein. Nuts, meat, beans, cheese, and eggs can all be excellent protein sources. Consume these foods for breakfast and as an after-school snack. It might increase focus and extend the duration of the effects of ADHD medications.

More intricate carbs. These people are the good guys. Fill on fruits and vegetables, such as kiwis, oranges, tangerines, pears, and grapefruit. Consume this kind of food in the evening to aid in falling asleep.

They increased omega-3 fats. These are present in salmon, tuna, and other cold-water white fish. Other foods containing these include Brazil nuts, walnuts, and olive and canola oils. An omega-3 fatty acid supplement is another option. Vayarin, an omega compound, was approved by the FDA to be used in ADHD treatment plans.

Foods you can consider they are better to avoid when having ADHD are in general simple carbohydrates according to Roybal (2008) these could be the following things:

- *Corn syrup,*
- *Potatoes without the skins,*
- *Candy,*
- *White rice,*
- *White flour,*
- *Sugar.*

According to a lot of research Caffeine is a bad thing to feed your body but there is also a positive side of caffeine.

Konstantinovsky described in 2017 that caffeine increases dopamine levels, which in turn improves memory and attention in rats; some scientists believe caffeine may have applications in the treatment of ADHD. In a different experiment, hyperactive rats improved at navigating a maze when given caffeine beforehand. This implies that coffee may enhance spatial learning. Rats are not people, despite the exciting nature of these studies.

Always consider that when something has a good side it also has some side effects.

Although a previous study discovered that children's hyperactivity symptoms could be controlled with daily doses of caffeine (600 mg), there were numerous adverse effects.

Children with ADHD typically struggle to stay awake during the day and have more sleep issues. Coffee can interfere with sleep, which could exacerbate these problems. In 2017, Konstantinovsky.

For people with ADHD, it is important to watch what they eat and avoid simple carbohydrates and caffeine. The balance is important.

2.5 EFFECTS OF MINDFULNESS AND SPORTS

This article describes their way to use meditation instead of medication. They describe how to use mindfulness training for parents and children with ADHD and the effects of medication. Meppelink et al (2016) describe in their research that long-term side effects are poorly understood, but short-term side effects may be reversible when medication is stopped. Research on the effects of long-term medication use on heart rate, blood pressure, growth, and the incidence of manic, psychotic, and suicidal symptoms is scarce.

For this research it is important to take in consideration what the side effects are to tackle this later when answering the research question.

According to recent research from Chan et al (2021), these symptoms can be effectively reduced with the right exercise training. Research has indicated that acute exercise and consistent physical activity can trigger psychological and physiological processes that enhance physiological and cognitive functions, such as memory and executive function, in addition to promoting physical and psychological health.

For people with ADHD, it is important to work out regularly to improve physical health but also improve cognitive functions that are the cause of most of the ADHD symptoms.

“When exercise intensity is moderate–high, the body activates neurophysiological responses to induce the synthesis of neurotransmitters, secrete brain-derived neurotrophic factor (BDNF), and increase the blood flow to the brain, thereby improving neuroplasticity and enhancing information-processing capacity [28]. These effects can alleviate ADHD symptoms and their comorbidities [29] and facilitate neural growth and regulation in the brains of children with ADHD. (Chan et al., 2021)”

Working out is important for people in general but for people with ADHD it can lower their symptoms.

Levine (2018) describes that the active reflection on your thoughts and feelings could also be a way to ease your mind and create more focus.

According to Levine meditation helps to thicken the prefrontal cortex and it also helps to raise the level of dopamine and people with ADHD have a shortage of dopamine in their brain.

According to a UCLA (Neat Gang) study, once a week, a 2 ½ hours meditation session and daily 5 to 15 minutes of home meditation will improve your focus within eight weeks.

Levine (2018) describes that there has been research on the effect of yoga on mostly children with ADHD. Yoga strengthens the prefrontal cortex and increases the dopamine level. After eight weeks of 40 minutes of yoga a week, there are significant differences in attention and focus.

According to multiple research sports and mindfulness could help dealing with the symptoms of ADHD and even make them less.

3. METHODOLOGY

3.1 RESEARCH QUESTIONS

The following research question is based on the topic mentioned earlier.

“ How could we create more awareness of the way to live without ADHD medication and the usefulness of social media for this way of life?”

3.1.1 SUB-QUESTIONS

- What is ADHD?
- What is the effect of living with medication?
- What is the effect of living without medication?
- Whom will it affect if more people live without medication?
- What is the effect of using social media to create awareness?

3.2 GOAL/ HYPOTHESIS

The overall goal of this thesis is to create more awareness of the way to live without ADHD medication, how to use social media to share the knowledge of this research and create a social change to liberate people who want to live without ADHD medication.

3.3 SAMPLES

This research will be conducted in the Netherlands.

The leading group for the research is people with ADHD between the age of 18 and 27 years old who live without medication. The second group is people between the age of 18 and 27 years old who live with medication but want to live without medication. The third group will be family members of people with ADHD and how they experience it. The last group of people who are gone will be interviewed as experts in the field of ADHD. The experts that are planned to be interviewed are:

- Prof. Dr. Jan Buitelaar (child and adolescent psychiatrist expertise in ADHD.)
- Prof. Dr. Pieter Hoekstra (child and adolescent psychiatrist who has focused his research on ADHD, autism spectrum disorders, and related neurodevelopmental conditions.)
- Prof. Dr. Barbara Franke (molecular geneticist and expert in psychiatric genetics.)
- Dr. Sandra Kooij (psychiatrist and researcher specializing in adult ADHD.)

These people are the most famous in the Netherlands in the field of ADHD. However, if it could not be possible to interview them the interviews could also be conducted with less famous people who for example work for ADHD central, a prominent organization that is considered as a helping organization for people with ADHD or other organizations in the social/ humanities field.

3.4 METHODS

This research will start with surveys that have been shared on social media, and universities will be used; for this research, my network of professors at the University of Applied Sciences in Nijmegen has been used. After this, interviews with a select group of people who are used to having ADHD and live without medication and how they would see the usefulness of social media. Interviewing people out of their close circle to hear their experiences would also be possible. The method that is going to be used for this is interpretative phenomenological analysis. After that, it will be analysed by using SPSS.

3.5 LIMITATIONS

The limitations of this research are:

- Resources, the lack of knowledge about this topic, and the need for more time.
- The sample group and free participation make it harder to find enough participants.

Generalizability is a significant limitation because it could differ in every European country.

4. RESULTS

The results are obtained through semi-structured surveys and structured interviews.

The figures used for this analysis are added to the appendices listed under 6.2.

The themes that are used to analyse the are:

- Definition of ADHD
- Medication
 - Positive effects
 - Negative effects
- Social media
 - Positive effects

- Negative effects
- Society
- Skills and treatments

Firstly, as was mentioned before, ADHD stands for Attention Deficit Hyperactivity Disorder. According to Figure 3, we see that 36.9 % agree that ADHD is a disorder, 24,3% see it as a unique ability, and 38,8 % are not sure what it is—comparing the interviews and survey questions. The following themes are mostly mentioned as seen as part of ADHD. On the positive side, creativity is mentioned 34 times, open-mindedness is mentioned at least seven times, and helpfulness is mentioned two times.

On the other hand, some limited factors, such as learning ability and planning, are mentioned seven times.

The most significant limiting factor is attention deficit, which is mentioned seven times, concentration six times and procrastination two times.

Some themes could be negative or positive. For example, energy is mentioned nine times. It has been mentioned as harmful because of its impact on society; negatively, it can also cause a drop in energy, which was mentioned three times. It can also be positive because there is way more energy for things you need to do.

This brings us to the topic of hyperfocus, which was mentioned nine times, and according to the interviews and survey, this is the most beneficial asset of ADHD.

The results of the use of medication are both positive and negative.

According to Figure 4, 1% agreed that medication is the only way to help people with ADHD, 15,4% were not sure, and 83,7% thought that it was not the only way to help people with ADHD.

According to the research responses, 51 times, an adverse effect of medication was mentioned. This could be a suppressed feeling, a dry mouth, or a nosebleed, but also the feeling of flattened emotions; this is mainly described as the feeling of being a zombie. The response also mentioned multiple forgetfulness and the need for proper sleep.

Social media is a common thing nowadays; according to the responses, 27,9% are useful, 43,2% are not entirely sure, and 27,9% disagree with the usefulness of social media.

This information is mentioned in Figure 6. Social media could be positive or negative. On the one hand, it could cause a change in addiction, hyperfocus and impulsivity. During two

interviews, it was mentioned that people with ADHD are more likely to get into an addiction. The advertising on social media could have a negative effect on people with ADHD. Also, the hyperfocus of people with ADHD could cause them to spend more time than they realize on social media; in all the interviews, it was mentioned that this is a problem.

On the other hand, it could be a helpful tool to create awareness and share knowledge. A side note for this is that it has to be checked if the knowledge is correct. During 3 of the interviews, it was mentioned that there was much misinformation.

Society is a new theme that occurred during the interviews, According to all the interviews, there is a misunderstanding about people with ADHD. In all the interviews, it was mentioned that society puts people with ADHD in the same box, but according to the respondents, this is not true. They all affirmed that they see a difference between males and females. The most important findings are that every person with ADHD is different, and that society accepts a hyperactive boy more than a girl. Males tend to struggle more with what society sees, and females struggle more with what is happening in their brains, according to the responses of the interviews.

Figure 5 portrays the opinion of the respondents on whether sport or meditation could be helpful for people with ADHD. 56,7% think that this could be beneficial, 40,4% are not sure, and 2,9% think this is not useful

Sport, meditation, mindfulness, skills training, and treatment could have a positive effect, according to this research.

The skill of how to deal with and accept ADHD is mentioned 17 times. According to this, learning how to plan is mentioned seven times. Guidance and help to balance out life in a proper way are mentioned six times. Fidget toys, yoga, and meditation are mentioned two times, as well as control stimuli; it could, for example, create situations with low stimulation in a gym without music and flashing lights.

Treatment as behaviour therapy is mentioned 3 times.

5. DISCUSSION AND CONCLUSION

In this part of this research, we discuss the findings. We create a comparison between the literature review and the collected data.

Here you will find as conclusion the answer on my sub and main questions.

What is ADHD?

As was mentioned before, according to the DSM (2013), ADHD is a disorder that is mainly recognized by the systems of inattention deficit and or impulsivity and hyperactivity.

The findings of this research are overall the same as what the DSM-5 has noted down.

According to the respondent's people with ADHD are on the positive side creative, helpful, energetic,

On the negative side they could be all over the place, they could be too energetic.

The biggest asset and the biggest downfall for people with ADHD is hyperfocus.

One of the most interesting findings is that in some countries or tribes ADHD is not recognised.

Even back in the days of hunter's people who have ADHD could hunt really well because of their energy and protect their group.

What is the effect of living with medication?

The effect of living with medication is for some people very positive. The literature describes that taking stimulant medications it could reduce the risks of suicide, lowering the rate of substance- related events and lowering the rates of criminality.

It also has positive effects, ADHD symptoms, better relationships, fewer difficulties at work, and improves academic performance.

During analysing the surveys and interviews the responses where mostly negative

The following effects are most common: a suppressed , dry mouth, nosebleed but also the feeling of flattened emotions, this is mostly described as the feeling of being a zombie. The response also mentioned multiple forgetfulness and the lack of proper sleep.

According to the literature

The negative effects of medications could also be that you could experience a lack of appetite, sleep disturbance and tics. These side effects will wave away when you stop with the medication.

One of the most shocking findings is.

Stimulants can temporarily slow growth in children, whose growth does not later accelerate.

What is the effect of living without medication ?

The literature writes the following things about things to do living without medication.

According to Chan et al (2021) exercise training can reduce the ADHD symptoms.

Their research describes that regular physical activity will create psychological health, physical health and boost executive function, cognitive functions, and memory.

According to Levine meditation helps to thicken the prefrontal cortex and it also helps to raise the level of dopamine and people with ADHD have a shortage of dopamine in their brain.

According to a UCLA (Neat Gang) study, once a week, a 2 ½ hours meditation session and daily 5 to 15 minutes of home meditation will improve your focus within eight weeks.

The literature shows that it is possible to live without (or less) medication if you exercise your body and brain.

According to this research, the respondents are not entirely sure but also not pessimistic about the use of non-medication ways of living with ADHD.

According to this research, sports, meditation, mindfulness, and skills training and treatment could have a positive effect.

The skill of how to deal with and accept ADHD is one of the most important things to implement. This could be achieved through good guidance, behavioural treatments, and structure.

Whom will it affect if more people live without medication?

People with ADHD are affected a lot if they live without medication, but this could be because of the way that society sees them.

According to all the interviews, there is a misunderstanding about people with ADHD.

In all the interviews, it was mentioned that society puts people with ADHD in the same box, but according to the respondents, this is not true. They all affirmed that they see a difference between males and females. The most important findings are that every person with ADHD is different, and that society accepts a hyperactive boy more than a girl.

Males tend to struggle more with what society sees, and females struggle more with what is happening in their brains, according to the responses of the interviews.

What is the effect of using social media to create awareness?

Social media is a common thing nowadays; according to the responses, 27,9% are useful, 43,2% are not entirely sure, and 27,9% disagree with the usefulness of social media. This information is mentioned in Figure 6. Social media could be positive and negative; on the one hand, it could cause a change in addiction, hyperfocus and impulsivity.

During two interviews, it was mentioned that people with ADHD are more likely to get into an addiction. Through the advertising on social media, this could hurt people with ADHD.

Also, the hyperfocus of people with ADHD could cause them to spend more time than they realize on social media; in all the interviews, it was mentioned that this is a problem.

On the other hand, it could be a helpful tool to create awareness and share knowledge.

A side note is that it has to be checked to see if the knowledge is correct. During 3 of the interviews, it was mentioned that there was much misinformation.

“ How could we create more awareness of the way to live without ADHD medication and the usefulness of social media for this way of life?”

To conclude, the answer to the main question could be now that living without medication or less medication could be possible if society learns more about how people with ADHD behave and that the stigma about ADHD will vanish away. For people with ADHD, it is important to learn to live and accept that they have ADHD, structure their lives, find good guidance and, most importantly, find balance in life. The use of social media could be a fantastic asset to create awareness and a platform to share experiences and knowledge that is certificated.

6. APPENDICES

6.1 LIST WITH TIPS AND TRICKS

6.1.1 PERSON WITH ADHD

- Application "super brains" (advice of Professor Buitelaar),
- Acceptation and adaptation,
- Structure,
- A network that accepts who you are,
- Find your fidget toy to distract yourself.
- Watch what you eat and avoid simple carbohydrates and caffeine,
- Exercise,
- Meditation,
- Mindfulness.

6.1.2 HEALTHCARE AND SOCIETY

- Do not put all people in boxes,
- Treat people for their needs not their labels.
-

6.2 LIST OF FIGURES

Figure 1

1. Do you have ADHD or know somebody in your close circle who has ADHD or ADD?

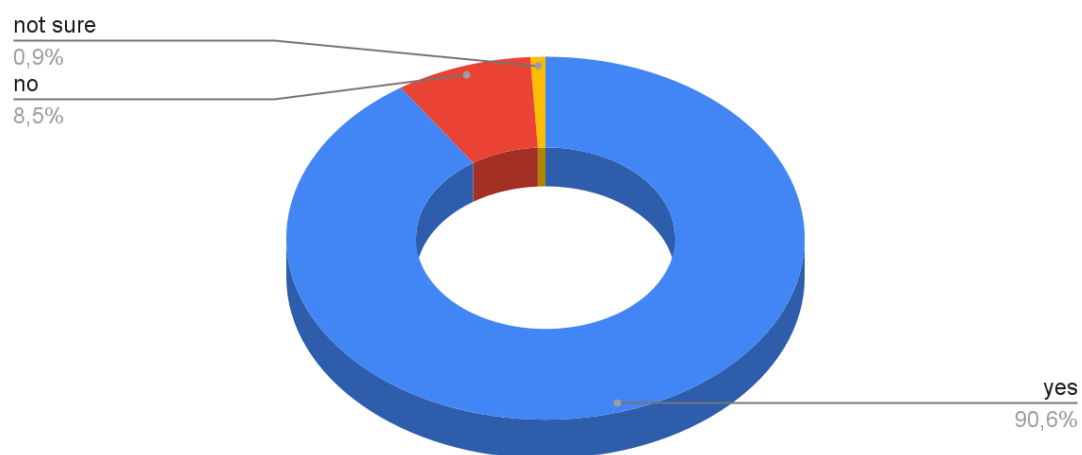


Figure 2

2. Do you use medication or do you know the experience of people who use medication?

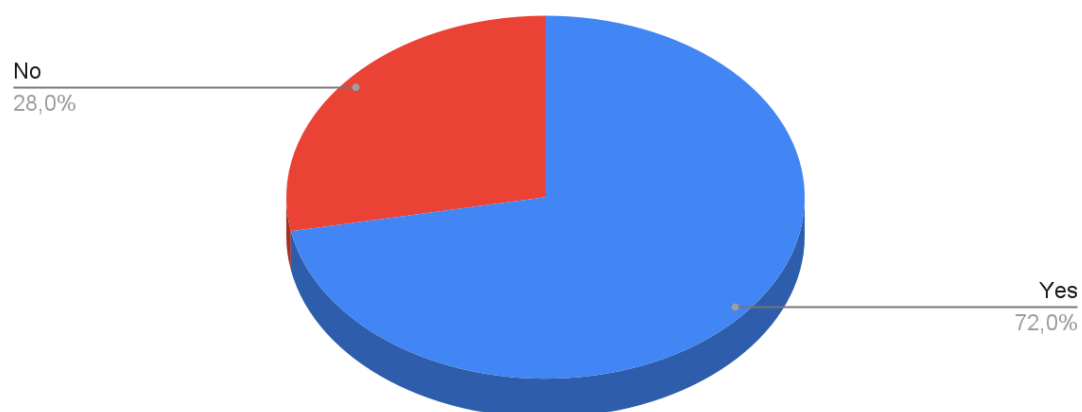


Figure 3

6. Do you consider ADHD as a disorder or as a special ability?

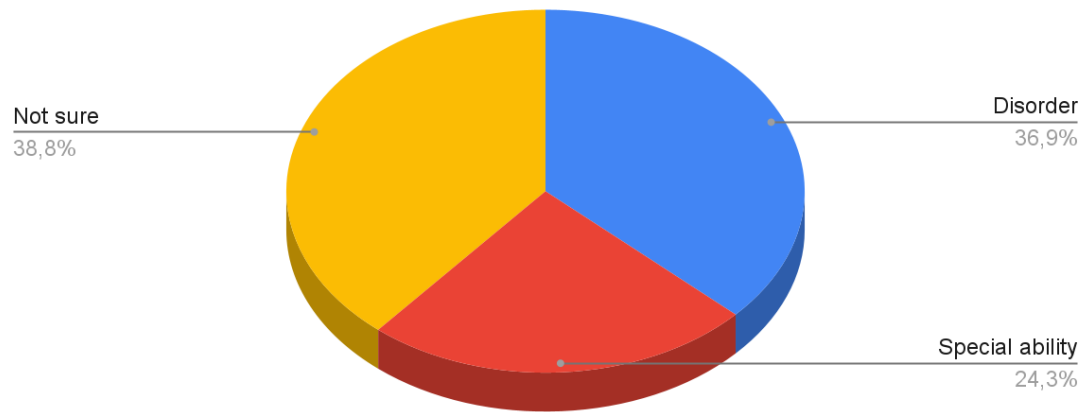


Figure 4

8. Do you think medication is the only way to help people with ADHD ?

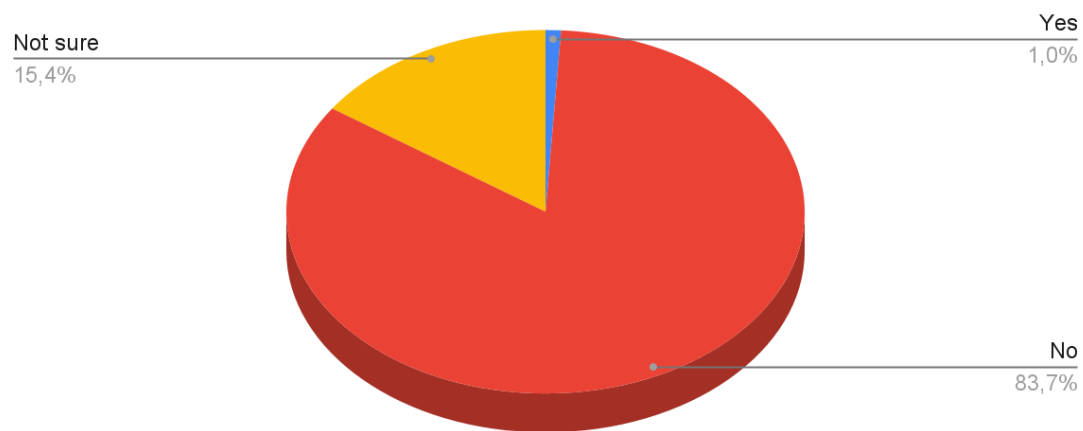


Figure 5

9. Could sports or meditation help people who are dealing with ADHD ?

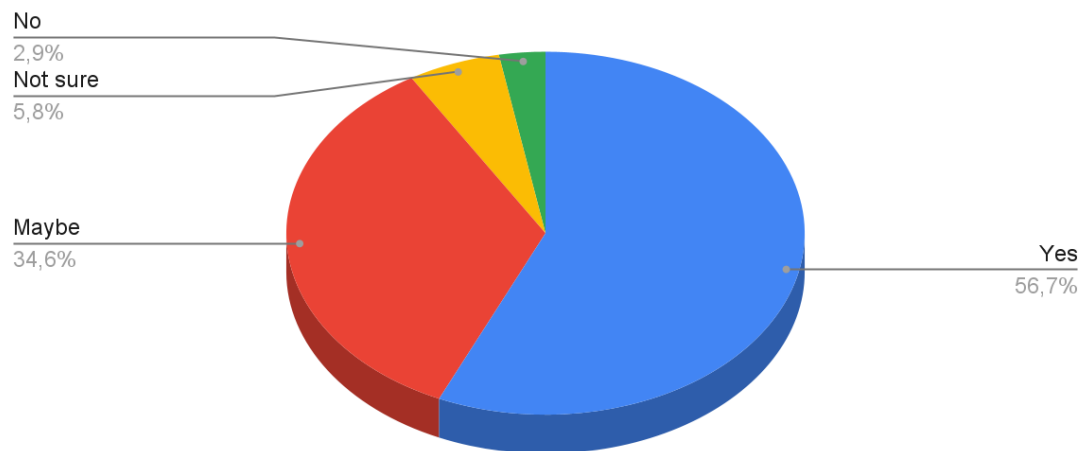


Figure 6

10. Do you think social media could be a helping platform for people to deal with ADHD?

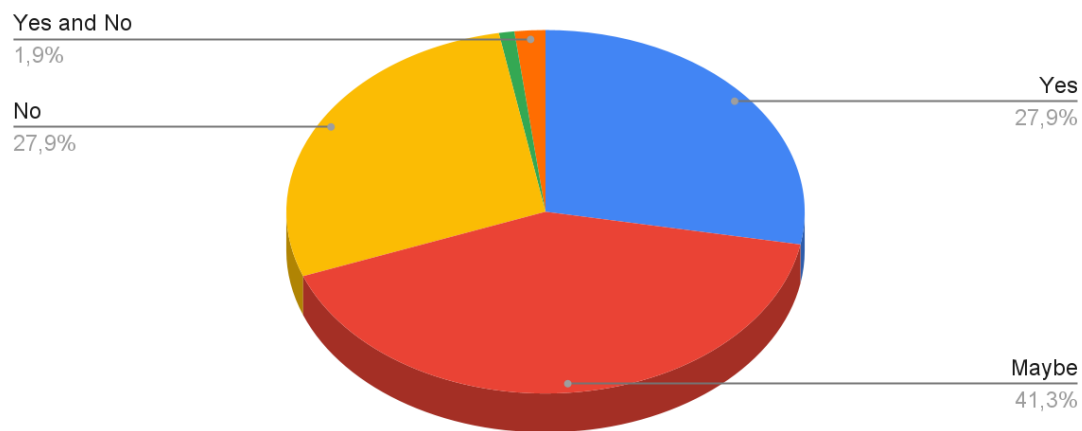


Figure 7

11. Do you think the Dutch health care system is helping to teach people how to deal with

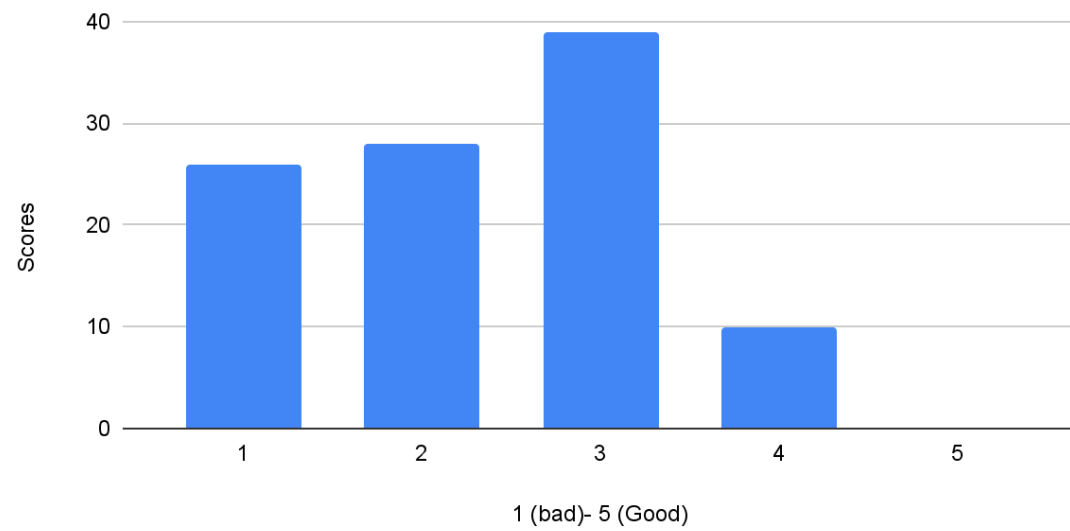
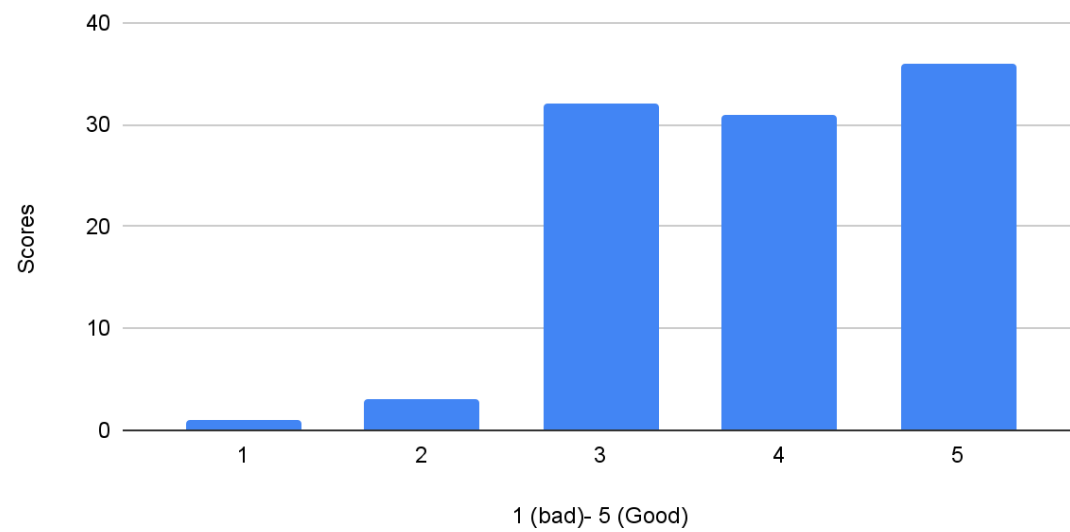


Figure 8

12. Do you think the Dutch health care system needs changes to help people better who



6.3 LIST OF ABBREVIATIONS

ADHD - Attention Deficit Hyperactivity Disorder

6.4 SURVEY QUESTIONS

1. Do you have ADHD or know somebody in your close circle who has ADHD or ADD? * if your answer is no, skip to question 5
2. Do you use medication or know the experience of people who use medication?
3. Could you share the experiences you were thinking about when you answered question 2
4. Could you live without medication, and what would you need to live without it / experience of those people who used medication or did not use it?
5. What is your opinion about using medication to help people with ADHD?
6. Do you consider ADHD a disorder or a unique ability?
7. If you answered the question above, can you explain it?
8. Do you think medication is the only way to help people with ADHD?
9. Could sports or meditation help people who are dealing with ADHD?
10. Do you think social media could be a helping platform for people to deal with ADHD?
11. Do you think the Dutch healthcare system is helping to teach people how to deal with ADHD without medication?
12. Do you think the Dutch healthcare system needs changes to help people better who deal with ADHD and want to live without medication?

6.5 INTERVIEW QUESTIONS

Sample group between 18-27

1. Can you describe your life with ADHD?
 - Where did you struggle with?
 - What was negative and positive?
 - What did you miss?
 - Which medication did you use, and what are your experiences?
 - What do you think about the help of the Dutch healthcare system?
2. What do you know about other people's experiences?
3. Is ADHD a disorder or a unique ability?
4. What could help instead of medication?
5. Could social media be beneficial for the help of people who have ADHD?

Specialist

1. Can you introduce yourself?
2. Could you tell us something about your research on interdisciplinary approaches to ADHD, pharmacology, and genetics?
3. Could you tell me about your work for the ADHD World Federation?
4. What is your opinion on the availability of information regarding help for young people between the ages of 18 and 27 with ADHD?
5. What do you think of the help of the Dutch healthcare system? Would you like to change something about this?
6. What is your opinion on the use of medication, and are there any therapy/daily activities that could help?
7. Is ADHD just a disorder or also a superpower?
8. Could social media as a platform help?

6.6 TRANSCRIPTS OF INTERVIEWS

It could be provided if necessary.

6.7 INFORMED CONSENT FORM

Everyone who responded to the survey and interviews agreed to give complete freedom to use the data. The informed consent forms from the interviews could be provided if necessary.

7. REFERENCES

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>

Chan, Y., Jang, J., & Ho, C. (2021). Effects of physical exercise on children with attention deficit hyperactivity disorder. *Biomedical Journal*, 45(2), 265–270. <https://doi.org/10.1016/j.bj.2021.11.011>

Everything you need to know about Concerta. (2019, July 5). <https://www.medicalnewstoday.com/articles/325674>

Faraone, S. V. (2003, June 1). *The worldwide prevalence of ADHD: is it an American condition?* PubMed Central (PMC). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1525089/>

Fellman, M. (2008, June 10). *IS ADHD AN ADVANTAGE FOR NOMADIC TRIBESMEN IN KENYA?* <https://www.northwestern.edu/newscenter/stories/2008/06/ariaaltribe.html>.

Galan, N., RN. (2023, May 17). *What to know about guanfacine for the treatment of ADHD.* <https://www.medicalnewstoday.com/articles/325695>

Global Definition of Social Work. (n.d.). <https://www.ifsw.org/what-is-social-work/global-definition-of-social-work/>

Konner, M. (2013, September 10). *Is ADHD a Disease of Civilization?* <https://www.psychologytoday.com/us/blog/the-tangled-wing/201009/is-adhd-disease-civilization>.

Konstantinovsky, M. (2017, September 6). *Caffeine and ADHD.* WebMD. <https://www.webmd.com/add-adhd/adhd-caffeine>

Lange, K. W., Reichl, S., Lange, K., Tucha, L., & Tucha, O. (2010). The history of attention deficit hyperactivity disorder. *Adhd Attention Deficit and Hyperactivity Disorders*, 2(4), 241–255. <https://doi.org/10.1007/s12402-010-0045-8>

Levine, H. (2018, January 24). *Meditation and Yoga for ADHD.* WebMD. <https://www.webmd.com/add-adhd/adhd-mindfulness-meditation-yoga>

Meppelink, R., de Bruin, E. I. & Bögels, S. M. (2016). Meditation or Medication? Mindfulness training versus medication in the treatment of childhood ADHD: a randomized controlled trial. *BMC Psychiatry*, 16(1). <https://doi.org/10.1186/s12888-016-0978-3>

Multum, C. (2023, September 13). *adderall-xr.* <https://www.drugs.com/mtm/adderall-xr.html>

MNT Medical Network. (2022, February 8). *Adderall (amphetamine/dextroamphetamine)*. https://www.medicalnewstoday.com/articles/326219#_noHeaderPrefixedContent

Neat gang. (n.d.). *how mindful meditation and yoga can help treat ADHD*. <https://neatgang.com/heketee-therapy-resources/how-mindful-meditation-and-yoga-can-help-treat-adhd>.

PharmD, J. C. (2023, January 10). *List of ADHD medications: Comparing types*. <https://www.medicalnewstoday.com/articles/325201#methylphenidate>

PharmD, J. M. W. (2023, April 12). *Strattera side effects: What you should know*. <https://www.medicalnewstoday.com/articles/drugs-strattera-side-effects>

Roybal, B. (2008, May 12). *ADHD Diet and Nutrition: Foods To Eat & Foods to Avoid*. WebMD. <https://www.webmd.com/add-adhd/adhd-diets>

Smith, M. P. C. (2017). Hyperactive Around the World? The History of ADHD in Global Perspective. *The Journal of the Society for the Social History of Medicine*, 30(4), 767–787. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5903618/>

Smith, M. R. (2017). Hyperactive Around the World? The History of ADHD in Global Perspective. *Social History of Medicine*, hkw127. <https://doi.org/10.1093/shm/hkw127>

Villines, Z. (2021, November 9). *Why is ADHD awareness important?* <https://www.medicalnewstoday.com/articles/adhd-awareness>

Villines, Z. (2021, November 30). *What are the long-term effects of ADHD medication?* <https://www.medicalnewstoday.com/articles/long-term-effects-of-adhd-medication>

Wolraich, M. L., Chan, E., Froehlich, T., Lynch, R. L., Bax, A., Redwine, S. T., Ihyembe, D., & Hagan, J. F. (2019). ADHD Diagnosis and Treatment Guidelines: A Historical Perspective. *Pediatrics*, 144(4). <https://doi.org/10.1542/peds.2019-1682>