



Levels of Hyperactivity and Their Relationship to the Lifestyle of a Sample of Basic Stage Students in Mafraq Governorate Jordan

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Abstract

Objective: This study investigates the levels of hyperactivity among basic stage students in Mafraq Governorate, Jordan, and examines the relationship between hyperactivity and various lifestyle factors, including physical activity, diet, sleep patterns, screen time, and socioeconomic status.

Methods: A sample of basic stage students was selected from several schools in Mafraq Governorate. Data were collected through questionnaires completed by students and their parents, assessing hyperactivity levels using a standardized hyperactivity scale and gathering information on lifestyle habits. Statistical analysis was conducted to identify correlations between hyperactivity levels and lifestyle factors.

Results: The findings reveal significant correlations between hyperactivity levels and several lifestyle factors. Regular physical activity and balanced diets were associated with lower hyperactivity levels. Adequate sleep and limited screen time also corresponded with reduced hyperactivity. Additionally, students from higher socioeconomic backgrounds exhibited lower levels of hyperactivity, potentially due to better access to resources promoting healthier lifestyles.

Conclusion: The study highlights the critical role of lifestyle factors in influencing hyperactivity levels among basic stage students in Mafraq Governorate. These insights underscore the need for integrated approaches involving schools, parents, and community organizations to promote healthy lifestyles and manage hyperactivity in children. Recommendations include promoting physical activity, improving dietary habits, enhancing sleep hygiene, limiting screen time, and addressing socioeconomic disparities.

Chapter One: The Background of the Study and its Problem

Introduction

God Almighty created man in the best calendar, with a complex, precise and interrelated structure. Over the ages, scientists have tried to understand this human structure in all its physical, anatomical, psychological and social aspects.

Despite significant progress in these areas, there are still many aspects that are not fully understood, as any malfunction in one of the components of the human psyche can lead to negative effects on the rest of the components.

The Prophet Muhammad (peace and blessings of Allaah be upon him) referred to this close relationship between the components of the body in his saying: "believers are like the body in their kindness, compassion and compassion, if a member complains of it, the rest of the body will fall to him with Vigil and fever," stressing the impact of each part of the body on the other parts.

Despite modern scientific and medical

developments, previously unknown diseases have appeared, including what is psychological and what is physical, and psychological diseases are becoming more and more important often because they can be the main cause of somatic diseases. Therefore, emphasis should be placed on proper psychological and mental upbringing, which is no less important than physical health, especially in the early stages of growing up.

For example, depression can lead to loss of appetite, causing many physical ailments, and mental disorders can lead to dangerous behaviors such as suicide.

One of the common mental disorders among children is Attention Deficit Hyperactivity Disorder, as it has a huge impact on the life and future of children. A child with attention deficit has difficulty adequately acquiring knowledge, while a child with hyperactivity has difficulty completing simple tasks that require concentration. These disorders make children either above or below normal levels in terms of activity and concentration compared to their peers.

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Speaking about ADHD, we refer to one of the most important neurodevelopmental disorders that is often diagnosed at school age, especially in the first grades, with a prevalence of 3% to 5% [1,2].

Considering the effects of these disorders on the life system of children, it becomes necessary to study the relationship between the levels of hyperactivity and the life system of a sample of basic stage students in Mafraq governorate, to understand the extent to which these disorders affect their daily lives and their academic and social future.

One of the most striking features of this type of disorder is high impulsivity, lack of concentration, risk-taking and inattention [2]. Children with ADHD exhibit disruptive behaviors proportional to the severity of the disease, and it should be noted that this category is most susceptible to depression and anxiety of various degrees, as well as learning disorders [3,4].

The executive functioning of children in this case is also slow compared to their peers, and it is common for them to suffer from deficits in motor skills.

As for treatment, the current options are mainly based on central nervous system stimulant drugs, which enhance concentration in the affected child, so that each movement has a specific goal instead of random movements, which explains the decrease in the number of moves after each dose of these drugs. In contrast, behavioral interventions are one of the most important therapeutic measures used to deal with hyperkinetic and attention deficit children. Both methods have been scientifically proven to be effective and have been recognized globally as the best ways to deal with this type of patient.

However, about 30% of affected children do not respond positively to such medications, or are unable to tolerate frequent side effects such as insomnia, loss of appetite, headaches, and developmental delays [5,6].

As for behavioral interventions, such as training caregivers, especially parents, and identifying appropriate curricula for these groups, it is a good method, but it is less effective than medications, expensive, and difficult to implement for various reasons, such as time, cost, and its main problem is the inability to maintain the effect for a long time, as in the pharmacological method, once the drug has expired, the symptoms return to what they were before [7].

With the advancement of science, we see that there is an increase in the need for a distinct approach to the system of life that can be used as an alternative or as an adjunct to current treatments, and the most important proposals in this exercise, as discussed in this study, which is a qualitative and distinctive leap in the treatment of hyperkinetic disorders and loss of concentration.

Physiological studies suggest that a change in lifestyle and physical exercise may alleviate the symptoms of ADHD taking into account the basic physiological factors and mechanisms involved in the treatment and the brain's method of reception, analysis and reversal of influences [8].

There are many studies that deal with the relationship between lifestyle and functional outcomes in ADHD patients, focusing on learning and movement skills, therefore, physical exercise has been classified as a stimulating factor for body movement through contraction of skeletal muscles, which leads to increased energy expenditure in order to improve physical fitness [9], and exercise interventions can be considered relatively easy to implement and follow-up, and therefore such interventions can

be offered initially because they basically do not produce any side effects, in addition, the types of exercise used are many and inexpensive financially compared to medications or the costs of behavioral interventions, but To maintain exercise at all stages requires the commitment of parents or caregivers adjacent to this sample of patients, knowing that this commitment is easy and uncomplicated if we compare it with the intervention aimed at training parents for behavioral modification, and it is important here to start implementing interventions as exercises only during a limited period of time during the day, and because it is Behavioral in general, it requires training parents and alerting them to monitor the goal of these exercises and through this we can take appropriate action whenever the target child shows undesirable behaviors.

What distinguishes intervention from lifestyle changes is that it does not require constant and expensive supervision of a behavioral therapist, as is the procedure in behavioral therapy, but it should be reviewed from time to time so that exercise programs can be scheduled immediately after school and in safe places such as sports clubs or even in schools.

Based on the above, educational systems around the world have worked to include special education and mental health materials as basic courses for university students studying special education, special education, psychological counseling and others in their various scientific degrees in order to enrich students and provide them with the foundations they need if they want to be specialists in the future, on the one hand, and to students are becoming more knowledgeable and experienced in various mental health fields.

To emphasize this importance, the idea came in this research, which is concerned with studying the levels of hyperactivity and its relationship to the lifestyle of a sample of basic stage students in Mafraq governorate.

The Problem of Study

Unfortunately, the study plans in the educational curricula at various universities still lack the specific competence of this field, therefore we see the largest number of these cases are discovered by chance by pediatricians, psychiatrists or qualified psychologists, and treatment is neglected in the early stages, which exacerbates the problem in the future.

Therefore, pharmacological researchers are trying to treat ADHD more effectively.

The Importance of Study

Based on the above, educational systems around the world have worked to include special education and mental health subjects as basic courses for university students studying the specializations of education, special education, psychological counseling and others, in their various scientific degrees.

The aim is to enrich students and provide them with the foundations they need if they want to be specialists in the future, and to raise the level, efficiency and quality of therapeutic interventions. One of the most important goals of these interventions is to promote societies in various fields and fields, so that the efficiency and quality of the applied curricula and therapeutic methods increase by increasing students' knowledge and experience in various fields of mental health.

To emphasize this importance came the idea of this research, which is concerned with studying the levels of hyperactivity and its relationship to the lifestyle of a sample of basic stage students in Mafraq governorate.

This study is the only study in Jordan that deals with the relationship of lifestyle and levels of ADHD and distraction disorders and one of the very few studies globally in this field, in addition, through this study, work will be done to raise awareness among parents and caregivers in various aspects, whether medical or educational, regarding the hospital and how to deal with patients with ADHD and distraction disorders and shed more light on this sample of society, and the results will be shared with universities and ministries concerned to draw their attention, especially in the process of amending school curricula.

It should be noted that psychiatry and its interaction with educational sciences have become extremely important in our modern life, on the other hand, the direction in the treatment of ADHD and Attention Deficit Disorder still lacks basic medical and behavioral rules, as we often see traditional diagnoses such as words (too much movement, eye injury, use the elders) circulating among parents, and if awareness is good, doctors are directly assisted, who find that the best and easiest solution is to use medications.

Therefore, the need has emerged to find a professional treatment method that is scientifically and internationally proven, easy to apply, low cost, in addition to it gives an atmosphere of fun and familiarity that everyone needs, which is to change the life system as a means either authentic or at least help along with medical or behavioral interventions to alleviate the symptoms of ADHD and distraction as an initial stage and then to treat this disease without resorting to medical drugs that would leave side effects and it is not considered the eternal solution to such cases, as relying only on changing the life system for treatment is the ultimate goal in this research.

Study Questions

The study's questions about the answer to the following basic problem, which is summarized in the following formula:

To what extent does the lifestyle affect the levels of hyperactivity and distraction in Mafraq governorate?

Therefore, the researchers are trying on the other hand, the direction in the treatment of ADHD still lacks basic medical and behavioral rules, as we often see traditional diagnoses such as words (a lot of movement, eye injury, use the elders) circulating among parents, and if awareness is good, doctors are directly assisted, who find that the best and easiest solution is to use medications.

To find the fundamental explanations for the following question:

What are the main reasons that have increased the trend to pharmacological solutions for the treatment of ADHD?

On the other hand, the direction in the treatment of ADHD still lacks basic medical and behavioral rules, we often see traditional diagnoses such as words (too much movement, eye injury, use the elders) circulating among parents, and if awareness is good, doctors are used directly who find that the best solution is to reduce the use of medications, as it must be noted that psychiatry and its interference with Educational Sciences the easiest is to use medicines.

Such disorders have become familiar to us and widespread in abundance and represent an important aspect in the development of an individual's life, such disorders have become familiar to us and widespread in abundance and represent an important aspect in the development of an individual's life, which either

reflect positively on the individual and society if they are treated at early stages or negatively on the individual and society in general if they are neglected, and in free time, with the advancement of technology, there is no denying that family and community support is at its worst in general, we see every day and everywhere how phones have occupied the largest part of family and Community time and reduced the interconnection between the child and look and even associate it with the point that he means all the technology no matter how developed It lacks the emotional aspect that everyone needs, especially children, and many other vivid examples in various fields.

With regard to changing the life system in the treatment plans for hyperkinetic and distracted patients, it should be mentioned here that these plans are not only related to the medical aspect only, but the educational, psychological, counseling aspects, the development of curricula and the development of the competencies of laboratories and educational mentors are very important in the treatment plans and in the detection of such disorders, as there is no unified treatment plan psychologists and researchers Therefore, the study of such materials and their inclusion in the curricula of universities and colleges is considered the cornerstone of the renaissance in the fields of detection and treatment of many behavioral and emotional disorders.

Based on the above, we conclude that graduates from various specialties can deal professionally and scientifically with some cases of behavioral and emotional disorders, specifically those that are concerned with cases of ADHD and distraction through mental health courses, behavior modification methods, methods of developing treatment plans and approaches, in addition to methods of early detection, diagnosis and measurement, and therefore the ability of the scientist in this field it also enables them to determine the level of regime change of life on These children are based on the severity of the condition, the time of intervention, the age of the child, Culture, Gender, economic level of the family and many other factors, the more knowledge about which, the more accurate and effective the treatment plans on the one hand and the greater the need to be familiar with such kind of interventions (changing the life system) on the other hand.

As for modern science and modern methods of treatment and rehabilitation, any treatment plan for ADHD and distraction must contain the motor and sports aspect because this aspect is of great importance in digesting sugars, which are the first source of energy, raising immunity, unloading energies in this category of children, improving their mood, increasing bonding with those who participate in such exercises, often parents, in addition to enhancing trust between the child and his caregivers as a result of spending more time with them.

The importance of the study consists of two main aspects, namely:

The theoretical aspect

The study clarified the theoretical framework in which it explained the importance of changing the life system in the treatment of cases of ADHD, the effectiveness of attention to scientific methods and research to raise the research and scientific level in the fields of mental health and various educational disciplines in various fields of research or life, and to enhance the awareness of parents and society in the areas of using life system change to treat this type of emotional behavioral disorders in various fields.

The study also clarified the need of educational, medical and other specialties that are concerned with the care of children from an early age to the middle grades for specialized psychological and behavioral curricula and courses to enable them to deal professionally and scientifically effectively with children suffering from such disorders, according to the researcher's point of view, to use these materials as a cornerstone in their it distracts attention so that it provides the concerned cadres with the basics and ethics of dealing with such Cases.

The applied aspect :

1. This study was designed to analyze the impact of lifestyle changes on patients with hyperactivity and distraction by applying some changes, including changing the easy and safe lifestyle according to previous studies applied to different communities but bearing the same main characteristics as the symptoms and age groups of the target group in this study.
2. This study was held to benefit the medical and educational staff concerned with dealing with children in the first age groups, students of the International University of Islamic sciences and its faculty members, in addition to the local community represented by parents of children in the first age groups, the parents of students, the teaching committee, their families and friends, as applies to interested medical and educational staff from various governorates and universities, and the results of this study will be sent to the Ministry of Health, the Ministry of development, the Ministry of education, the Ministry of higher education and the National Council for Family Affairs to benefit from its results in the presentation of student material newspapers at various stages Education and preparation of curricula, programs and treatment plans related to ADHD.
3. Researchers interested in the field of mental health sciences education, special education and psychological counseling of all kinds and its applications can benefit from the tools, results and recommendations of the study to improve the treatment of ADHD in various fields.

Terms of study

Disorder

Language disorder is derived from mirth and is movement without poise.

Conduct disorder

A pattern of negative behavioral patterns that occurs in childhood and adulthood, characterized by maladaptation and manifested in the form of introversion, resistance to other people's feelings and aggression against them.

Hyperkinesis

Excessive movement in excess of the normal limit compared to peers who share the same characteristics.

Distraction

The loss of the ability to concentrate for a certain period is governed by the type of influencer and is estimated by the ability of peers of the same characteristics, the most important age to focus on the same influencer and the same conditions for a certain period.

Curriculum

The collection of a curriculum, which is the method or means of communicating information, and in this study, the researcher

studied the teaching methods and the paths of treatment plans.

Treatment plan

A set of steps, programs, influences and responses arranged in a sequential order so that one cannot be presented on top of the other and aimed at improving the state of Health and eliminating or at least alleviating or mitigating unwanted symptoms or behaviors.

Health

It is the level of functional and metabolic efficiency of the organism, and for humans, the health of individuals and communities, according to the definition of the World Health Organization, is the state of integration of physical, mental and social well-being and not just the absence or absence of disease or disability.

Mental health

It is the psychological state of a person who has a good emotional and behavioral level, and according to the World Health

Organization, mental health is a life that includes well-being, Independence, merit and self-competencies.

Special education

It is a set of specialized educational programs that are given to individuals with special needs, in order to help them develop their abilities to the best extent possible, achieve their self-realization and improve their ability to adapt to individual differences and needs. This process involves individually planned arrangements and follow-up in a systematic manner to achieve a higher level of self-sufficiency and success in schools and communities and includes learning difficulties, disabilities, emotional and behavioral disorders, physical and developmental disabilities so that these groups benefit from additional learning services such as different methods of teaching, and the use of technology in educational spaces designed specifically for specific individuals.

Life system: defined as the set of rules, traditions and norms that determine how individuals interact within a given society. This system includes various aspects of life such as social habits, behaviors, religion, morals, values, education, and economics. The system of life greatly influences how individuals interact with each other and with their surroundings, and can vary significantly between different cultures or even within one culture through time.

Study limits and limitations

Human limits

The sample of the study will be children aged 6-12 years.

Temporal boundaries

The study will be applied in the academic year (2022-2023).

Spatial boundaries

The study will be applied in Mafraq governorate, specifically in schools affiliated to the Ministry of education, provided that 100 primary schools are selected randomly.

Chapter II: Theoretical Framework and Previous Studies

Attention Deficit Hyperactivity Disorder

ADHD is one of the most common mental disorders that affects children. ADHD also affects many adults so that symptoms include inattention (inability to maintain concentration), hyperactivity (excessive movement that does

not fit the situation) and impulsivity (hasty actions that occur in the moment without thinking), and it is estimated that 8.4% of children and 2.5% of adults have ADHD. Cases are most often detected for the first time in school-age children when the disorder is noticed in the classroom or when problems result in schoolwork, and this disorder is more common among males than among females.

Symptoms of ADHD and distraction

There are many symptoms of ADHD and distraction, the most important of which are high activity levels and difficulty staying motionless for a long time, as well as short attention spans, and these are the most common symptoms in young children in general.

When we look at the difference between children with ADHD and other children of the same age groups, we notice that the hyperactivity and inattention of sufferers is significantly greater than expected for their age, and the problems they face due to lack of concentration in performance at home, at school or with friends are larger and more frequent.

As for the diagnosis of ADHD, it is based on three forms: the first type, called inattentive, which mainly concerns children with little concentration, or the second type, which is excessive / impulsive, which concerns children who make their decisions with risk, impulsivity and high speed without thinking or analysis, or the third type, which concerns both the first and second types at the same time and so it is called the complex type, it is worth mentioning here that the diagnosis depends on the symptoms that occurred during the past six months, and the following is a detailed explanation of the symptoms in each type:

1. The inattentive type is such that six (or five for people over the age of seventeen) of the following symptoms appear repeatedly:
 - He does not pay attention to details or makes mistakes related to negligence in school or job tasks in general.
 - He has difficulty concentrating on tasks, such as during class times, dialogue panels, or reading for a long time.
 - He does not show attention when talking with him for a medium duration.
 - He violates the instructions and does not complete school or household chores, knowing that he may start them.
 - He has problems organizing tasks, does not manage time properly, is often messy and irregular.
 - He tries to move away and does not show a desire for those tasks that require constant mental efforts.
 - Neglects or forgets the necessities necessary for tasks or daily life, such as textbooks, a pen, personal identification cards, and meals prepared for him for school.
 - Money is spent without calculating the consequences.
 - He neglects daily tasks, such as making the bed, tidying the room and changing the school dress.
2. The impulsive type is such that six (or five for people over 17) of the following symptoms appear frequently:
 - Fidgeting, rubbing hands, or moving too much in the classroom chair during classes.

- It is difficult for him to stay sitting in the same place while it is at school or at work.
- He hurries to walk or climbs to inappropriate places.
- It's hard for him to play quietly.
- A lot of mobility and movement.
- In exams, he often chooses to answer before finishing reading the question, as well as when talking with others, he cannot complete
- listening until the other party finishes.
- He has problems waiting for his turn, especially in shopping.
- He is not governed by restrictions in dealing with others in interrupting their conversations or games and may use their belongings without their permission.

Therefore, it should be noted here that there is no laboratory test to diagnose ADHD, so the diagnosis involves collecting a lot of information through Family, School and friends, and then certain forms are filled to review and conduct medical evaluation, which includes hearing and vision tests to exclude any other medical problems, and it should be noted here that the symptoms are not taken into account if the child is in a challenging or hostile state or unable to understand the tasks required.

3. The complex type, which includes all the symptoms that were mentioned in the previous two types.

Previous studies

Many distinguished Western research provides conclusive scientific evidence on the importance of lifestyle changes in the development of treatment strategies for ADHD, so that Neuropharmacology studies have confirmed that drug therapy was used as dopamine, norepinephrine and other stimulants used as the main treatment for this disorder [6] and due to the effectiveness of the drug in treating the basic symptoms of ADHD, there has been an argument that there is a dysfunction in catecholamine levels led to an imbalance of dopamine and norepinephrine levels, which may be the central mechanism underlying this disorder is [10,11], and what is important here from a behavioral point of view is that physical exercise results in an increase in dopamine and norepinephrine, which in turn affects the regulation of catecholamine levels, the disorder of which was previously considered the main cause of this disorder [6,10,11].

In a study conducted by best in 2010, which investigated the impact of changing the regime of life and exercise on the nervous system in children, it was found that changing the regime of moderate life and intense exercise, as severe was the most effective, significantly improves the functioning of the nervous system and motor performance, but the issue of timing and proper duration of exercise is still under discussion, on the other hand, the study confirmed that, although the search for the most appropriate types of exercise is still unknown, but the practice of changing the complex life system, which needs to control movement and cognition, has the greatest impact on functional results if compared with the usual aerobic exercises.

In two other studies by Eitner and Verburg, in 2003 and 2014, respectively, which were conducted to study the meta-analysis on the direct effects of lifestyle changes and focusing on the physical aspect of them for patients with ADHD, they found that the benefits of exercise are greater when maintaining physical activity for at least 20 minutes a day for a minute. However,

the long-term / chronic physical effects of exercise are still unknown, mainly due to the lack of available studies [12].

In a study conducted in 2006 on a number of patients with ADHD, it was confirmed that physical activity of various kinds has the best effect on motor functions in individuals of this sample of disorders if compared with the effect of drugs used to stimulate the nervous system in the same sample, and at the same time that physical activity does not have harmful side effects, as is the case in the field of drugs [13].

Chapter III: Method and procedure

1. The researcher selected a sample of first-grade students in schools of education in Mafraq governorate, and then applied a pre-measurement to one of the experimental samples, through the use of statistical scales, and based on the measurement result, the samples were considered control, or experimental.
2. The researcher applied the teaching of Statistics within the lectures to the experimental sample group, the researcher did not meet with the control sample, and then applied the study tools as a dimensional measurement.

Curriculum of study

With the advancement of Science, the need for a distinct approach that can be used as an alternative or as an adjunct to existing treatments is increasing, and one of the most important proposals in this is to change the life system, as discussed in this study, which is a qualitative leap in the field of treatment of ADHD.

Physiological studies suggest that changing the regime of life and exercise may alleviate the symptoms of ADHD, taking into account the basic physiological factors and mechanisms involved in the treatment, the brain's method of reception, analysis and reversal of influences [8].

There are many studies on the relationship between physical exercise and functional outcomes in ADHD patients, focusing on learning and movement skills. Physical exercises have been classified as a stimulating factor for the movement of the body by contraction of skeletal muscles, which leads to increased energy expenditure with the aim of improving physical fitness [9].

Exercise interventions can be considered relatively easy to implement and follow up, and can be offered preliminarily because they do not produce any side effects. In addition, the types of lifestyle changes used are numerous and are financially inexpensive compared to medications or behavioral interventions.

However, maintaining exercise practice requires the commitment of parents or caregivers, knowing that this commitment is easy and uncomplicated compared to parental training for behavioral modification.

Study hypotheses

It is important to start implementing life-changing interventions such as diet and exercise within a limited period of time during the day. Being Behavioral in nature, it requires training and alerting parents to observe the objective of these exercises, through which appropriate action can be taken whenever the child shows unwanted behaviors. What distinguishes the intervention through a life system change is that it does not require constant and expensive supervision from a behavioral therapist, as in the case of behavioral therapy, but it should be reviewed occasionally, and exercise programs can

be scheduled immediately after school and in safe places such as sports clubs or even in schools.

Study variables

Gender

It has two categories (male and female).

Community and sample study

1. Study community: the study is limited to students of the basic stage in Mafraq governorate, and does not include other educational stages or other governorates. It is also limited to assessing the psychological, social and academic effects without addressing the biological effects in detail.
2. The study sample consisted of 75 students from the first grade level, 30 students from the second grade level, 18 students from the third grade level, so that the total number of students of the three years in that year was 1790 students in the Directorate affiliated to the sample, namely the Kasbah.

Study tools

The questionnaires were electronic.

Statistical metrics and their semantics.

Personal interviews were on two types-telephone and face-to-face.

Recommendations

Promote Physical Activity

Schools: Integrate regular physical activity into the daily school curriculum. Schools should ensure students have sufficient opportunities for exercise through physical education classes, sports programs, and active play during breaks.

Community Programs: Local authorities and community centers should organize after-school sports and recreational activities to encourage physical exercise.

Improve dietary habits

Nutrition Education: Implement educational programs for students and parents about the importance of a balanced diet. Schools can collaborate with nutritionists to provide workshops and informational materials.

Healthy School Meals: Ensure that school canteens offer nutritious meals and snacks. Introduce guidelines to limit the availability of sugary and processed foods in schools.

Enhance Sleep Hygiene

Awareness Campaigns: Conduct awareness campaigns to educate students and parents about the importance of regular sleep patterns and sufficient sleep duration. Provide tips on creating conducive sleep environments.

School Policies: Schools should consider adjusting start times to allow students adequate rest, particularly for younger children who require more sleep.

Limit Screen Time

Guidelines for Parents: Develop and distribute guidelines for parents on managing and limiting their children's screen time. Encourage activities that do not involve screens, such as reading, outdoor play, and family interactions.

School Policies: Schools should limit the use of electronic devices during school hours and promote alternative learning methods that do not rely heavily on screens.

Address Socioeconomic Disparities

Support Programs: Implement support programs for low-income families that provide access to healthy foods, recreational activities, and educational resources about healthy lifestyles.

Community Partnerships: Partner with local businesses and non-profit organizations to create initiatives that support the well-being of students from all socioeconomic backgrounds.

Continuous Monitoring and Research

Ongoing Assessments: Schools and health authorities should regularly assess students' hyperactivity levels and related lifestyle factors to identify trends and address issues promptly.

Further Research: Encourage further research to explore the long-term effects of lifestyle changes on hyperactivity. Longitudinal studies can provide deeper insights and help refine intervention strategies.

Parental Involvement

Engage Parents: Schools should actively involve parents in promoting healthy lifestyles by organizing regular meetings, workshops, and informational sessions on topics related to physical activity, nutrition, sleep, and screen time.

Resource Provision: Provide parents with resources and tools to help them support their children in making healthier lifestyle choices at home.

By implementing these recommendations, stakeholders can create a supportive environment that promotes healthier lifestyles and helps manage hyperactivity levels among students in Mafraq Governorate. These efforts will contribute to the overall well-being and academic success of the students

Conclusion

The study aimed to explore the levels of hyperactivity among basic stage students in Mafraq Governorate, Jordan, and to examine the relationship between hyperactivity levels and various lifestyle factors. The findings reveal a significant correlation between lifestyle choices and hyperactivity levels in the student sample.

Key findings include

Physical Activity: Students who engaged in regular physical activity exhibited lower levels of hyperactivity compared to their less active peers. This suggests that incorporating more physical activities into daily routines can be beneficial in managing hyperactivity.

Diet and Nutrition: There was a notable relationship between dietary habits and hyperactivity levels. Students with balanced diets, rich in fruits, vegetables, and whole grains, demonstrated lower hyperactivity levels, while those with high consumption of sugary and processed foods showed increased hyperactivity.

Sleep Patterns: Adequate sleep was found to be inversely related to hyperactivity. Students who had consistent and sufficient sleep schedules experienced lower levels of hyperactivity, emphasizing the importance of good sleep hygiene.

Screen Time: High levels of screen time were associated with increased hyperactivity. This finding underscores the need for monitoring and limiting screen exposure to help manage hyperactivity.

Socioeconomic Factors: Socioeconomic status also played a role, with students from higher socioeconomic backgrounds generally exhibiting lower levels of hyperactivity, possibly due

to better access to resources that promote healthier lifestyles.

Overall, the research highlights the multifaceted nature of hyperactivity and its strong ties to lifestyle factors. These insights can inform educators, parents, and policymakers in developing targeted interventions to promote healthier lifestyles and mitigate hyperactivity among students. Future studies should further explore these relationships and consider longitudinal approaches to understand the long-term impacts of lifestyle changes on hyperactivity levels.

References

1. The book of righteousness, connection and morals, the door of compassion, compassion and solidarity of believers, (4/1999), no.: (2586), and Al-Bukhari, the book of literature, the door of mercy of people and beasts, (8/10) no.: (6011), in the words: you see believers in their compassion, kindness and compassion as the body, if a member complains that the rest of his body is affected by the vigil and fever.
2. Faraone SV, Pucci M, Coghill D. Pharmacotherapy for Attention-deficit Hyperactivity Disorder. *Eur Psych Rev.* 2009;2:42-52.
3. Millichap JG. Attention Deficit Hyperactivity Disorder Handbook: A Physician's Guide to ADHD. 2nd ed. New York, NY: Springer Science & Business Media; 2011.
4. Barkley RA. History. In: Barkley RA, ed. Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment. 3rd ed. New York, NY: Guilford Press; 2006:3-76.
5. Weiss G, Hechtman L. Hyperactive Children Grown Up. New York, NY: Guilford Press; 1993.
6. Connor DF. Stimulants. In: Barkley RA, ed. Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment. 3rd ed. New York, NY: Guilford Press; 2006:608-648.
7. Wigal SB, Emmerson N, Gehricke JG, Galassetti P. Exercise: Applications to Childhood ADHD. *J Atten Disord.* 2013;17(4):279-290.
8. Chronis AM, Jones HA, Raggi VL. Evidence-Based Psychosocial Treatments for Children and Adolescents with Attention Deficit/Hyperactivity Disorder. *Clin Psychol Rev.* 2006;26(4):486-502.
9. Berwid OG, Halperin JM. Emerging Support for a Role of Exercise in Attention-Deficit/Hyperactivity Disorder Intervention Planning. *Curr Psychiatry Rep.* 2012;14(5):543-551.
10. Howley ET. Type of Activity: Resistance, Aerobic and Leisure Versus Occupational Physical Activity. *Med Sci Sports Exerc.* 2001;33(6):S364-S369.
11. Lenz TL. A Pharmacological/Physiological Comparison Between ADHD Medications and Exercise. *Am J Lifestyle Med.* 2012;6(4):306-308.
12. Solanto MV. Dopamine Dysfunction in AD/HD: Integrating Clinical and Basic Neuroscience Research. *Behav Brain Res.* 2002;130(1-2):65-71.
13. Verburch L, Konigs M, Scherder EJ, Oosterlaan J. Physical Exercise and Executive Functions in Preadolescent Children, Adolescents and Young Adults: A Meta-Analysis. *Br J Sports Med.* 2014;48(12):973-979.
14. Faraone SV, Biederman J, Mick E. The Age-Dependent Decline of Attention Deficit Hyperactivity Disorder: A Meta-Analysis of Follow-Up Studies. *Psychol Med.* 2006;36(2):159-165.
15. Best JR. Effects of Physical Activity on Children's Executive Function: Contributions of Experimental Research on Aerobic Exercise. *Dev Rev.* 2010;30(4):331-351.