Relationship between Quality of Life and Sleep Habits in Children with Attention Deficit Hyperactivity Disorder

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Abstract

Background: Children with Attention Deficit Hyperactivity Disorder suffer from symptoms that cause greater deficit in physical, psychosocial and sleep habits. Sleep problems have a greater impact on poor satisfaction and comfort which both Attention-deficit/hyperactivity disorder and sleep problems lead to a poor quality of life. **Aim of study:** Was to assess relationship between quality of life and sleep habits in children with attention deficit hyperactivity disorder. **Design**: A descriptive correlational research design was utilized to achieve the aim of the study. **Setting**: This study was conducted at the outpatient clinics of Psychiatric and Mental Health Hospital at Benha city, Qalubia governorate. **Study subject**: Convenient sample of 100 children with Attention-deficit/hyperactivity disorder and their parents / caregivers. **Tools of Data collection:** Three tools were used: **Tool 1:** Structured Interview Questionnaire, **Tool 2:** The Pediatric Quality of Life Inventory and **Tool 3:** Children's Sleep Habits Questionnaire. **Results**: More than half of the studied children have poor quality of life and half of the studied children have severe sleep habits. **Conclusion**: There was a highly statistically significant positive correlation between total quality of life and total sleep habits. **Recommendations**: Parent education and training in behavior management can improve behavior, enhance the Quality of life and sleep habits of their Attention-deficit/hyperactivity disorder children.

Keywords: Attention Deficit Hyperactivity Disorder, Quality of Life, Sleep Habits

Introduction

Attention-Deficit/Hyperactivity Disorder (ADHD) is a very common childhood-onset psychiatric condition of which the rates have risen over the past few decades and continue to raise **(El-Bakry et al., 2019).** ADHD is characterized by pervasive, persistent, and impairing symptoms of impulsivity, hyperactivity, and inattention that occur before the age of seven year, with the possibility of extending into adult life. ADHD has three subtypes which include the inattentive subtype, the hyperactive/ impulsive subtype, and the combined subtype **(Al-Habib et al., 2019)**.

Diagnosis of ADHD, symptoms should meet the diagnostic criteria in the Diagnostic and Statistical Manual of Mental Disorders – 5th Edition (DSM-5TM) for ADHD: Five or more symptoms of ADHD present to a degree that is developmentally inappropriate, the onset of these clinical features usually before the age of 12, lasted six months, interfere with daily life functioning and effect on the academic, behavior and social functioning. This must be evident in at least two setting and this disorder is not accounted for by any other behavior disorder. It can have large consequences including social interactions, increased risky behaviors, loss

of jobs, and difficulty achieving in school (**Anastopoulos et al., 2020**).

Between 70% and 85% of children with ADHD will experience problems with sleep (**Gunia et al., 2021**). The association between ADHD and sleep disturbance is well documented and the prevalence of sleep disturbances in ADHD vary widely. For instance, poor sleep in ADHD has been associated with increased distractibility, increased prevalence of conduct problems, hyperactivity, restlessness; and difficulties with attention, memory and learning. In a large sample of ADHD children with moderate-to-severe sleep problems, the behavioral sleep therapy was successful in reducing sleep problems, alongside improving ADHD behavior severity, classroom behavior and working memory task performance (**Knight & Dimitriou, 2019**).

Children with ADHD have deterioration in various parameters of QOL such as; physical, emotional, cognitive, school behavior, peer relations, and academic performance. ADHD is a multifaceted disorder that varies in its types and severity of its symptoms. Increased symptom severity associated with poorer QOL (**Alamolhoda et al., 2021**). In fact, sleep makes an independent and clinically significant impact on specific domains of functional impairment and QOL over and above difficulty due to ADHD symptoms (**Craig et al., 2020**).

Children with ADHD need guidance and understanding from their parents and teachers to reach their full potential and to succeed in school while the mothers need more information about the nature of disease and strategies for dealing with the child. Handling a child with ADHD was a heavy responsibility for the mothers and the lack of adequate support from the surrounding people makes child care more difficult. They also need psychological support and a center to help the child in behavior and academic aspects, since the majority of mothers face many challenges in different areas: activities of daily living, psychological well-being, social interaction, academic performance of the child, and socioeconomic loss (**Mandal & Dutta, 2021**).

The nurse can motivate the adherence to the treatments, explain about the risks and severities, analyze the psychosocial interaction, behavioral attitudes and, as necessary carry out planned interventions. In addition, nurses can communicate with the family, so that they understand in the best possible way that the children with ADHD need familiar support. Every mental health nurse, through its theoretical and scientific foundation, can perform these activities through inter disciplinarily and can contribute to the treatment of ADHD and evolutionary analysis, thus providing an improvement in the coping strategies of ADHD (**Paidipati et al., 2020**).

Significance of study

Attention-deficit/hyperactivity disorder (ADHD) is the most common behavioral condition and the second most common chronic illness in children. Attention deficit hyperactivity disorder (ADHD) is a frequent neurodevelopmental disorder that is widespread throughout the world, affecting 7% of children worldwide, for instance; 7.47% of African school-age children and teenagers, and 1.3 to 16 % in Arab countries (**Ayano et al., 2020**). The prevalence of ADHD in Egypt is 5-10% among children in school age and 2-4% among adults (**El-Monshed et al., 2020**).

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Children with ADHD face obstacles and impairment in academic, social, emotional domains and also essential biological functions like sleep which parents perceive as a burden (**National Institution of Mental Health, 2020).** Looking at Quality of Life, which is a crucial and holistic health parameter and an important outcome measure. Furthermore, sleep problems predicted or contributed to further impairment in the various QOL domains (**Kamath, et al 2019).**

Aim of the study:

The study aimed to assess relationship between quality of life and sleep habits in children with attention deficit hyperactivity disorder.

Research questions:

1. What is quality of life of children with attention deficit hyperactivity disorder?
2. What are sleep habits in children with attention deficit hyperactivity disorder?
3. What is the relation between quality of life and sleep habits in children with attention deficit hyperactivity disorder?

Subject and methods:-

Research Design:

Descriptive correlational research design was utilized to conduct this study.

Research Setting:

This study was conducted at the outpatient clinics of Psychiatric and Mental Health Hospital at Benha city, Qalubia governorate which is affiliated to General Secretariat of Mental Health in Egypt.

Research Subject:

Sample size:

Convenient sample of 100 children with ADHD and their parents / caregivers.

Sample technique:

A convenient sample of 100 children with ADHD and their parents / caregivers were

selected from the outpatient clinics of Psychiatric and Mental Health Hospital.

This sample should meet the following inclusion & exclusion criteria:

Inclusion criteria:-

- Children age (8 - 12 years old)
- Both sex

Exclusion criteria:

- Children with history of seizures or any other psychiatric disorders.
- Children with intellectual disability.
- Children with medical disorder or receiving medical therapy.

Tools of Data Collection:

In order to fulfill the aim of the study, the data was collected using the following three tools: -

Tool (1): - A Structured Interview Questionnaire: to assess the following parts:

Part I: **Socio–demographic data of children:** It consisted of 5 items to elicit data about the studied children such as age of child, sex of child, level of child education, type of school that the child attends and child birth order.

Part II: Socio–demographic data of caregivers: It consisted of 8 items: relation of caregiver to the child, age of caregiver, level of caregiver's education, occupation of caregiver, residence of caregiver, family size, family marital status and family income.

Part III: Clinical data for children with ADHD:

It consisted of 8 items: child's age at onset of signs & symptoms of the disease, child's age at onset of diagnosis of the disease, ADHD subtype, type of treatment the child receives, number of treatment sessions per week, risk

factors of ADHD, family history with ADHD and the degree of kinship of the child

Tool (2):- The Pediatric Quality of Life Inventory:

The scale was originally developed by **(Varni, 1998)** and it was translated into Arabic version by **(Arabiat et al., 2011).** It is a questionnaire assessment tool used to evaluate quality of life in children. The scale contains 23 items: physical (8 items), emotional (5 items), social (5 items), and school (5 items), all of which carry a 3-point range of responses, as follows: Always (0), Some- times (1), and Never (2).

Scoring system:
- Poor quality of life: (<23 grades).
- Fair quality of life: (23 – 34 grades).
- Better quality of life: (> 35 grades).

Tool (3):- The Children's Sleep Habits Questionnaire (CSHQ):

The scale was originally developed by **(Owens et al., 2000)** and it was translated into Arabic version by **(Asaad and Kahla, 2001)**. The scale designed to assess behavioral and medically based sleep problems in school children. The scale contains 33-items: bedtime (8 items), sleep behavior (13 items), waking during the night (4 items), morning waking (5 items) and daytime sleepiness (3 items) using a 3-point scale: Rarely (1), sometime (2) and usually (3).

Scoring system:
- Normal sleep habits: (<25 grades).
- Mild disturbance: (25-< 50 grades).
- Moderate disturbance: (50- 75 grades).
- Severe disturbance: (> 75 grades).

Higher scores reflect more difficulties in sleep habits except number 1, 2, 3, 10, 11& 26

Content Validity of tool:

Content validity of tools was done by jury of 5 expertises in Psychiatric and Mental Health Nursing; and pediatric nursing who checked the relevancy, comprehensiveness, clarity and applicability of the questions. According to their opinions, modifications were done and the final form was developed.

Reliability of the tool:

Test the reliability of the tools through Alpha Cronbach reliability analysis.

Tools	Alpha Cronbach
The Pediatric Quality of Life Inventory	0.814
The Children's Sleep Habits Questionnaire	0.825

Ethical Consideration:

The objectives and aim of the study were clarified by the researcher to every participant in the study, written consent obtained before conducting the interview and they were assured for maintaining anonymity and confidentiality. Every participant was informed that they have the right to participate in the study and the right to withdraw from the study at any time.

Pilot Study:

After the tools were designed, they were tested through a pilot study, which was done before its application in the field work to check clarity and feasibility of the designed tools to be sure that it was understood and to estimate the time needed to complete its items. It was carried on a sample of 10% (10 children with ADHD

and their parents / caregivers) who were excluded later from the main study sample to assure stability of the results.

Field work:

- The researcher started data collection by introducing herself to the child with ADHD and his/her caregiver. The researcher followed the specific precautions (wear mask, personal distance and using alcohol) due to corona virus circumstances after explanation and reassurance of caregivers and children. Brief description about the purpose of the study and the type of questionnaire required to fill was given to every participant.The sample was selected by interviewing 100 children with ADHD and their parents / caregivers that met the previous prescribed criteria. Data collection was done by interviewing every participant individually.The researcher started to collect data from caregivers of children, almost 6 children / day and each caregiver's interview lasted (30-45 minute). The process of data collection took a period of 2 months (from the first of October 2021 to the end of November 2021), 2 days / week (Monday and Thursday), from 9 A.M. : 1 P.M., 6 children / day.

Statistical analysis

All data collected were organized, coded, computerized, tabulated and analyzed by using The Statistical Package for Social Science (SPSS) program (version 25), which used frequencies and percentages for qualitative descriptive data, Chi-square was used for relation tests, mean and standard deviation was used for quantitative data and person correlation coefficient (r) was used for correlation analysis and degree of significance was identified. A highly statistical significant difference was considered if p-value < 0.01, statistical significant difference was considered if p-value < 0.05 and non-statistical significant difference was considered if p-value p > 0.05.

Results

Table (1) Shows that, three fifths (60%) of the studied children their age ranged between 8 <10 years, with mean age was 9.52 ± 1.39. As regard to sex, almost two thirds (65%) of them are males. Also, more than three quarters (76%) of the studied children had primary education and more than three quarters (77%) of them attend governmental school. As regard to child birth order, two fifths (40%) of the studied children are the last child.

Table (2) illustrates that, the majority (84%) of caregivers of the studied children are mothers and approximately less than half (48%) of caregivers their age ranged between 30- 40 year with mean age was 44.5 ± 7.25. As regard to educational level, two fifths (40%) of them have an intermediate education and approximately less than half (48%) of them are unemployed / housewife. Regarding to residence, more than two thirds (69%) of the studied children are live in rural area and the majority (88%) of them are live within small family size. As regard to marital status of caregivers of the studied children, the majority (83%) of them are married and more than half (56%) of them have enough family income.

Table (3) shows that, more than half (52%) of the studied children their age at onset of signs & symptoms of the disease ranged from 3 <6 years, with mean age was 3.6 ± 1.7 years. Also more than half (56%) of them their age at onset of diagnosis of the disease ranged from 3 <6 years, with mean age was 3.72 ± 1.4 years. As regard to ADHD type, more than two thirds (67%) of them diagnosed with combined type and more than half (56%) of them treated with both medication and treatment sessions. Also, more than two third (73.5%) of the

studied children who treated with treatment sessions received sessions once per week.

Caregivers of the studied children identified some risk factors for their children. Less than quarter (23%) of them was pre-mature birth and more than one fifth (22%) of them their mothers have health problems or receiving medication during pregnancy. Furthermore, less than one third (32%) of the studied children have family history of ADHD with more than one third (37.5%) of them from the first degree of kinship to the studied children.

Figure (1) Shows that, more than half (52%) of the studied children have poor quality of life. Also, more than one quarter of them (28%) have fair quality of life. While one fifth (20%) of them has good quality of life.

Figure (2) Shows that, half (50%) of the studied children have severe sleep habits. Also, one quarter (25%) of them have moderate sleep habits. While less than one fifth (18%) of them have mild sleep habit and only (7%) of them have normal sleep habits.

Table (4) Shows that, there is a highly statistically significant positive correlation between total quality of life and total sleep habits among the studied children at p-value = < 0.01.

Table (1): Frequency distribution of the studied children according to their socio-demographic data (n=100).

Socio-demographic data of the studied children	Studied children (n = 100)	
	N	%
Age		
8 < 10 years	60	60
10 ≤12 years	40	40
Mean SD	**9.52 ± 1.39**	
Sex		
Male	65	65
Female	35	35
Level of child education		
Primary education	76	76
Preparatory education	12	12
Don't attend to school	12	12
Type of school that the child attends		
Governmental school	77	77
Private school	7	7
Experimental school	4	4
Don't attend to school	12	12
Child birth order		
First child	36	36
Second child	24	24
The last child	40	40

Table (2): Frequency distribution of the studied caregivers according to their socio–demographic data (n=100).

Socio–demographic data of the studied caregivers	Studied caregivers (n = 100)	
	N	%
Relation of caregiver to the child		
Mother	84	84
Father	8	8
Grand mother	5	5
Aunt	3	3
Age		
< 20 years	3	3
20 <30 years	37	37
30 < 40 years	48	48
≥ 40 years	12	12
Mean SD		
Level of caregiver's education		
Illiterate	12	12
Read and write	4	4
Basic education	15	15
Intermediate education	40	40
High education	25	25
postgraduate studies	4	4
Occupation		
Unemployed / housewife	48	48
Private business	16	16
Governmental job	36	36
Residence		
Urban	31	31
Rural	69	69
Family size		
Small family size {family have 1-4 children}	88	88
Large family size { family have >4 children }	12	12
Family marital status		
Married	83	83
Widowed	4	4
Divorced	13	13
Family income		
not enough	36	36
enough	56	56
enough and more	8	8

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Table (3): Frequency distribution of the studied children according to their clinical data (n=100).

Clinical data for children with ADHD	Studied children (n = 100)	
	N	%
Child's age at onset of signs & symptoms of the disease		
< 3 years	36	36
3 <6 years	52	52
6 <9 years	8	8
9 ≤12 year	4	4
Mean SD		
Child's age at onset of diagnosis of the disease		
< 3 years	24	24
3 <6 years	56	56
6 <9 years	12	12
9 ≤12 year	8	8
Mean SD		
ADHD subtype		
Inattention type	20	20
Hyperactivity / impulsivity type	13	13
Combined type	67	67
Type of treatment the child receives		
Medication	32	32
Treatment sessions	12	12
Both	56	56
Number of treatment sessions per week (n=68)		
Once	50	73.5
Twice	11	16.2
Triple	7	10.3
(*) Early risk factors of ADHD		
health problems of mothers or receiving medication during pregnancy	22	22
Psychological problems of mothers during pregnancy	21	21
Pre-mature birth	23	23
Low birth weight	7	7
Early trauma	9	9
Head injury	20	20
Psychiatric illness in family	5	5
conflict between spouses	21	21
consanguinity between spouses	12	12
Twins	8	8
Children's punishment	10	10
Family history with ADHD		
Yes	32	32
No	68	68
If yes, The degree of kinship of the child (n=32)		
First degree	12	37.5
Second degree	11	34.4
Third degree	9	28.1
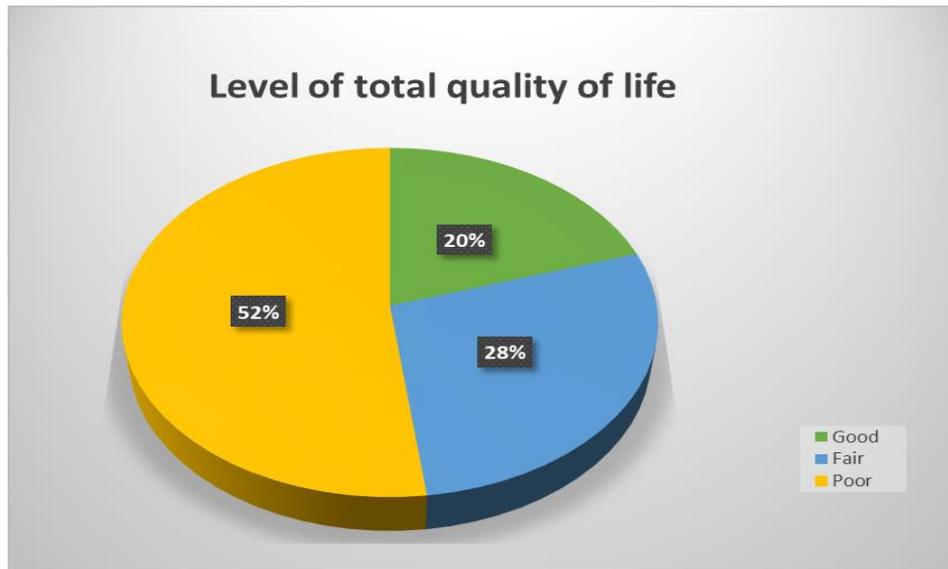
Figure (1): Distribution of the studied children according to level of total quality of life (n=100).
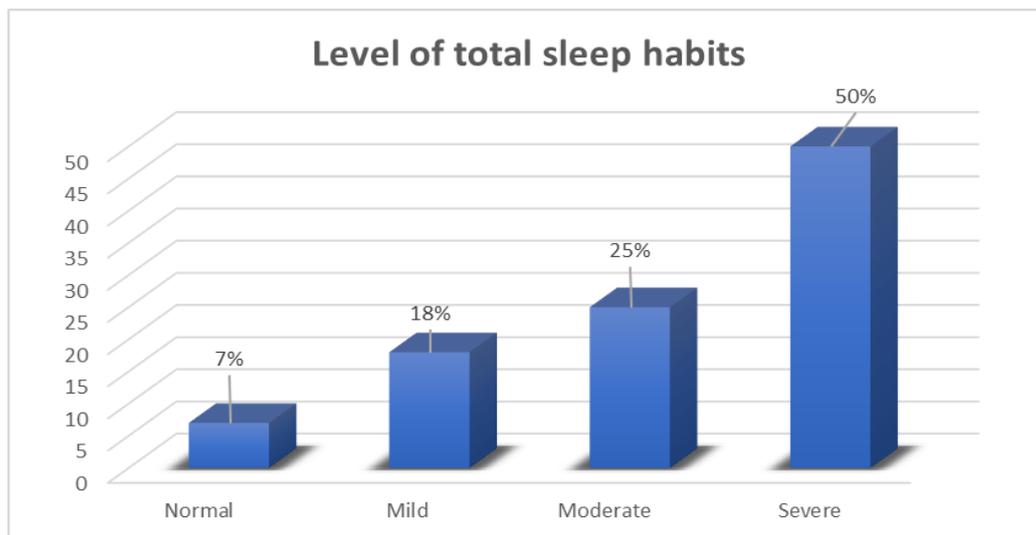

Figure (2): Distribution of the studied children according to level of total sleep habits (n=100).

Table (4): Correlation between total quality of life and total sleep habits among the studied children (n=100).

Variables	Total sleep habits	
Total quality of life	**R**	**p-value**
	.488	.000**

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Discussion

Attention Deficit Hyperactivity Disorder is one of the most common chronic disorders which influence millions of children worldwide. It is not merely a childhood disorder, but the symptoms may maintain throughout adolescence and persist into adulthood in up to 70% of children with ADHD. It is a lifelong neurodevelopmental disorder which has been hypothesized to negatively impact a person's QOL **Conlon, (2020).** Greater ADHD symptom severity increases the risk of sleep problems. These can have a significant impact on children's cognitive, physical functioning, psychosocial functioning, and school performance **Parreira et al., (2019).**

The result of the present study regarding to socio-demographic characteristics of children with ADHD, three fifths of the studied children their age ranged between 8 <10 years, with mean age was 9.52 ± 1.39. These results come in agreement with a study done by **El-Sadek et al., (2021)** who reported that children with ADHD, their mean age ± SD of 9.5±1.65 years, Also **Kousha & Kakrodi, (2019)** found that children with ADHD, their mean age ± SD of 9.30 ±1.3 years. On the other hand, this finding was in disagreement with a study carried out by **Darweesh et al., (2021)** who found that, children with ADHD, their mean age ± SD of 7.92 ± 1.66 years.

As regards to sex, the current study revealed that, almost two thirds of them are males with ratio1.8:1 male to female. These result come in line with a study done by **Ragab et al., (2020) & Çetin et al., (2020)** who mentioned that males affected nearly two times more female. On the other hand, this finding was in disagreement with a study carried out by **Mulraney et al., (2019)** who found that, males affected nearly six times more female. From the researcher point of view, the result of this study may be because hormonal changes between two sexes. Hormonal influences on the organization of behavior place males at greater risk for early developing disruptive behavioral disorders, so males tend to exhibit hallmark symptoms of hyperactivity.

Concerning to child birth order, the current study showed that two fifth of the studied children are the last birth order and more than one third of them the first birth order. Accordingly, a study done by **EL-Gendy et al., (2017)** found that the prevalence of the ADHD was higher if the child was the last one in the family. On the other hand, this finding was in disagreement with a study carried out by **El Ghaiaty et al., (2021)** who stated that, the last child affected with only 3.3% percent. From the researcher point of view; the risk of ADHD increases with the last child birth order as a result of increasing the mother's age and increase the risk of medical problems during pregnancy. Also, higher prevalence was reported in the first child birth order may be attributed to increased risk of complicated pregnancy in primigravida and the lack of experience of mothers to deal with the first baby.

As regards to relation of caregiver to the child, in this study the majority of caregivers of the studied children were mothers. This is agreement with **Mostafavi et al., (2020)** stated that the majority of caregivers of the children with ADHD were mothers. From the researcher point of view; the result of this study may be due to Egyptian family culture that, mothers have more responsibility compared to fathers in caring for children with ADHD; have more interactions with health-care providers, teachers, and school staff.

The result of this study revealed that, more than half of the studied children their age at onset of signs & symptoms of the disease ranged from 3 <6 years, with mean age was 3.6 ± 1.7 years. The result of this study come in agreement with a study done by **El-Sadek et al., (2021)** who founded that the mean age at onset of signs & symptoms appear was 4.7±1.5 years. The result of this study contradicted with a study done by **Al-Saad et al., (2021)** who stated that the age of onset of symptoms was raised from 7 years to 12 years. From the researcher point of view; this result may be due to the caregiver of child noticed fewer and warning signs at early age when the child became more interactive with the surroundings; and development of the child different from his peers.

The result of this study revealed that more than half of them their age at onset of diagnosis of the disease ranged from 3 <6 years, with mean age was 3.72 ± 1.4 years. This result was agreement with a study done by **Al-Habib et al., (2019)** who found that the mean age ± SD of disease diagnosis was 5.76 ± 2.28 years. Most cases are diagnosed when children are 3 to 7 years old, but sometimes it's diagnosed later in childhood. From the researcher point of view; this result may be due to that age of preschool and the child begin to go to the nursery school. At the time of the physician need obtain information from at least 2 places (home & school) to diagnose the disease. The mean age at onset of signs & symptoms and onset of diagnosis of disease are close to each other. This may indicated increase awareness of ADHD among caregivers of children that once signs & symptoms appear and affect their child, they seek for diagnosis.

Regarding to family history with ADHD, the result of this study referred to that less than one third of children had positive family history with ADHD with more than one third

of them from the first degree of kinship to the studied children. From the researcher point of view; it is may be due to that the most dangerous risk factor of the disease is the genetic factor which plays an important role in causing the disease especially if the degree of kinship was closer.

The result of this study was in agreement with a study done by **(Bhargava, 2021)** who stated that ADHD runs in families because from one-third to one-half of parents with ADHD will have a child with the disorder. There are genetic characteristics that seem to be passed down. If a parent has ADHD, a child has more than a 50% chance of having it. If an older sibling has it, a child has more than a 30% chance**.**

Concerning to total level of quality of life, the result of this study revealed that more than half of the studied children had poor quality of life levels. While only one fifth of them had good quality of life levels. From the researcher point of view; this may be related to that ADHD is associated with a variety of functional impairments, such as executive functioning deficits, attention issues, poor short-term memory which affect every aspect of daily life and produce negative consequences on their daily routine quality of life . Poor QOL is an essential problem for ADHD children and can predict adverse psychosocial outcomes for them. Thus, QOL may be a good predictor of treatment efficacy.

This result comes in the same line with a study done by **Noureldin, (2019); and Conlon, (2020)** who showed that all subscale scores (physical, emotional, social, and school functioning) of PedsQL scale are generally low. Also, emotions, social and school are of low values. Also, **Kousha & Kakrodi, (2019)** indicated that ADHD impact child's QOL negativity, with moderate effect in physical and severe effect in psychosocial domains, including emotional and social aspects and

school performance. This result was inconsistent with a study done by **Ragab et al., (2020)** reported that, ADHD had Poor overall domains of QOL and the physical domain of QOL better than the psychosocial domain.

Regarding to total sleep habits, the result of this study revealed that half of the studied children had severe sleep habits at all subscales. Also, one quarter of them had moderate sleep habits and minority of them had normal sleep habits. From the researcher point of view; this may be due to those hyperactivity symptoms and motor problems in children with ADHD that have been found to be associated with sleep problems. For this reason, the screening of sleep disorders is crucial in these children, especially since sleep disorders can trigger similar symptoms or worsen ADHD clinical characteristics.

This result comes in the same line with a study done by **Becker et al., (2018)** who showed that There is evidence that children with ADHD experience greater problems than their peers across a range of sleep problems, including higher bedtime resistance, more sleep onset difficulties related to bedtime subscale, more night waking, greater sleep-disordered breathing related to sleep behavior subscale, and higher daytime sleepiness.

Concerning to correlation between total quality of life and total sleep habits among the studied children the result of this study revealed that, there was a highly statistically significant positive correlation between total quality of life and total sleep habits among them. From the researcher point of view; ADHD may affect circadian rhythm, the ideal wake-cycle of sleep; and severe ADHD symptoms increases the risk of sleep problems and poor QOL. Sleep deprivation is associated with reduced quality of life, an increased risk of various

physical and mental health consequences as well as increased risk-taking behavior. Furthermore, poor sleep negatively affects performance of the child and relationships in school, which has consequences for school results and transition into adulthood and working life.

This supported by **Papadopoulos et al., (2018)**; and **Craig et al., (2020)** who revealed that, statistical significant associations were found between the overall score of CSHQ and PedsQLTM; and sleep makes a specific contribution over and above the impact of ADHD on QOL and that sleep problems associated with functional impairment and poor comfort.

Conclusion

Children with ADHD suffer from symptoms of inattention, hyperactivity and impulsivity which their quality of life domains are negatively affected. All of that prone them to have poor quality of life that in turn affect their sleep habits. The present study revealed that, more than half of the studied children have poor quality of life and half of the studied children have severe sleep habits. Also, it is observed that, there was a highly statistically significant positive correlation between total quality of life and total sleep habits.

Recommendations

Recommendations for children

- Psychosocial intervention program could improve executive functions in children with ADHD.

Recommendations for parent

- Parent education about disorder and involving behavior management of the child can improve behavior, enhance the QoL and sleep habits of their ADHD children.

Recommendations for teacher

- Provision of training and information for teachers about the characteristics of ADHD and behavioral classroom management.

Recommendations for nurse

- Health care providers especially nurses caring for children with ADHD must assess their sleep and QoL, and if the child experienced the problem, this must be addressed and managed.

Recommendations for society

- The importance providing social support and awareness programs to increase acceptance and avoid boiling toward these children.

Recommendations for further researcher

Further studies by using larger probability sample for generalization of the results.

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العلاقة بين جودة الحياة وعادات النوم لدى الأطفال المصابين باضطراب فرط الحركة ونقص الانتباه

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يُعد اضطراب فرط الحركة ونقص الانتباه أحد أكثر الاضطرابات النفسية شيوعًا عند الأطفال. قد يكون الأطفال المصابون باضطراب فرط الحركة ونقص الانتباه لديهم فرط النشاط وغير قادرين على التحكم في دوافعهم أو قد يواجهون صعوبة في الانتباه. تتداخل هذه السلوكيات مع جودة حياة وعادات نوم الأطفال المصابين باضطراب فرط الحركة ونقص الانتباه. تؤثر مشاكل النوم بشكل كبير على جودة الحياة. نظرًا لأن أعراض اضطراب فرط الحركة ونقص الانتباه ومشاكل النوم تؤدي إلى ضعف جودة الحياة ، فإن التشخيص والعلاج المبكر لهما أهمية كبرى. لذا تهدف الدراسة إلى تقييم العلاقة بين جودة الحياة وعادات النوم لدى الأطفال المصابين باضطراب فرط الحركة ونقص الانتباه. تم استخدام التصميم الوصفي الارتباطي لتحقيق هدف الدراسة وأجريت هذه الدراسة بالعيادات الخارجية بمستشفى الصحة النفسية والعقلية بمدينة بنها بمحافظة القليوبية على عينة ملائمة من 100 طفل مصاب باضطراب فرط الحركة ونقص الانتباه و أولياء أمورهم / مقدمي الرعاية. وقد أظهرت النتائج أن أكثر من نصف الأطفال الذين شملتهم الدراسة يعانون من جودة حياة سيئة وأن نصف الأطفال الذين شملتهم الدراسة لديهم اضطرابات شديدة فى عادات النوم. كما لوحظ وجود علاقة ارتباط موجبة ذات دلالة إحصائية عالية بين جودة الحياة الكلية وعادات النوم الكلية. لخصت الدراسة إلى أن الأطفال المصابون باضطراب فرط الحركة ونقص الانتباه يعانون من أعراض قلة الانتباه وفرط النشاط والاندفاع مما يؤثر سلبًا على جودة حياتهم. كل ذلك يعرضهم لسوء جودة الحياة التي تؤثر بدورها على عادات نومهم. كما أوصت الدراسة بتقديم برنامج التدخل النفسي والاجتماعي لتحسين الوظائف التنفيذية لدى الأطفال المصابين باضطراب فرط الحركة ونقص الانتباه.