WEEKLY EPIDEMIOLOGICAL REPORT

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Attention Deficit Hyperactivity Disorder (ADHD)-(Part II)

This is the second in a series of two articles on Attention Deficit Hyperactivity Disorder (ADHD) . First article described the causes and symptoms of ADHD and this article describes the diagnosis and treatment of ADHD.

Diagnosing ADHD in Children

Impairments due to the symptoms of ADHD must also have been observed in at least **two different settings**, such as school, community, social events or home. For example, a child who is overly active in the playground but has no problems concentrating on their schoolwork may not be appropriate for a diagnosis of ADHD.

So the critical questions to consider before diagnosis of ADHD is made are whether the symptoms are

(a) excessive compared with what would be expected
(b) longer-term rather than in response to a recent change
(c) pervasive rather than limited to one environment

The official diagnostic criteria for ADHD state that the symptoms must have appeared before the age of 7 , must occur beyond the extent that is normal for the person's age and have continued *for at least 6 months* (signs of possible attention deficit disorder may first be noticed long before the child begins schooling).

Other possible causes for unusual behavior should be ruled out before considering ADHD, for example

- A sudden change in the child's life, such as death of a close relative, divorce or loss of employment of a parent
- Previously undetected seizures
- Middle ear infection, which can cause hearing problems
- Other types of medical disorder that may be affecting the child's brain
- Learning disability
- Anxiety and/or depression

ADHD is often accompanied by:

- Anxiety
- Learning disabilities
- Speech or hearing problems
- Obsessive-compulsive disorder
- Tics
- Behavioral problems such as Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD)

Diagnosing ADHD in Adults

Many adults with ADHD have never been diagnosed with a problem in their early years or were given the wrong diagnosis such as a learning disability, attitude problem, personality or character disorder.

Nevertheless, the disorder may be the underlying cause of many personal and work problems including difficult relationships, anger, depression and alcohol or substance abuse. Once a proper diagnosis is made, the individual can begin to find their own way of coping, even using their excess energy in positive ways.

For adults, ADHD diagnosis involves examining the individual's past as well as their current difficulties. Family members may be asked to help. The specialist will review and assess their childhood and recollections of behaviours that may fit ADHD symptoms. Academic and job performance will be evaluated, as will family relationships and the nature and quality of the person's friendships.

The basic symptoms of ADHD are the same for both adults and children. However, adults may also suffer from low self-esteem, an increased sense of frustration and many problems caused by lack of focus and organizational skills. They may need further assessments to rule out mistaken diagnosis of other conditions, with which they may have been labelled for decades.

Management of ADHD

Management of attention deficit hyperactivity disorder (ADHD) has two important components- medication and psychotherapy interventions. Even though

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medication may help with immediate relief, the person with ADHD often needs to learn the skills needed to be successful while living with the disorder.

Medication

In the past, ADHD treatment has typically focused on medications. The specific class of medication most commonly prescribed for ADHD is stimulants. These stimulant medications -methylphenidate or certain amphetamines –are well tolerated and act quickly (usually soon after a person takes them), and in most people, have few side effects. Stimulant drugs are often beneficial in curbing hyperactivity and impulsivity and helping the individual to focus, work and learn. Sometimes the drugs will also help with coordination problems which may hinder sports and handwriting. Methylphenidate is a short acting drug and in older forms, had to be taken multiple times a day. Longer-acting versions of the drug are now available for once-daily use.

Newer drugs such as Pemoline, Dexmethylphenidate, Dextroamphetamine, Lisdexamfetamine, Atomextine and Guanfacine hydrochloride are also used and some of them are non-stimulant drugs.

Children vary a great deal in their response to medication. Finding the combination with the highest efficacy and fewest side-effects is a challenge in every case. If one medication does not appear to be working after a few weeks of treatment, another medication should be tried out.

Even after adjusting the type and dosage of medications, about ten per cent of children will gain no benefit from stimulant drugs. In this case, other types of drug can be tried, such as antidepressants. Antidepressants which target the brain chemicals dopamine and norepinephrine are the most effective. These include tricyclics, as well as newer antidepressants like Venlafaxine .

Medical treatment for adult ADHD can be similar to that for children -many of the same stimulant drugs can be of benefit, including the newer drugs. The antidepressant Bupropion has been found useful in trials of adult ADHD and may also help reduce nicotine cravings.

Side-effects of drugs used for ADHD

The majority of side-effects are minor and do not result in stopping the medication. They may be alleviated by lowering the dosage.
Most commonly observed side-effects for frequently prescribed medications for attention deficit disorder are:

- Decreased appetite – often low in the middle of the day and more normal by suppertime. Good nutrition is a priority
- Insomnia – may be relieved by taking the drug earlier in the day, or adding an antidepressant
- Increased anxiety and/or irritability
- Mild stomachaches or headaches
- Tics (more rare)

These medications only control ADHD symptoms on the day they are taken, so it is important to remember that the disorder is not actually cured.

Psychotherapy for children with ADHD

Some people turn to psychotherapy instead of medication, as it is an approach that does not rely on taking stimulant medications. Others use psychotherapy as an adjunct to medication treatment. Both approaches are clinically accepted. As well as medication, behavioural therapy, counselling and practical support will also help children with ADHD cope with the disadvantages of the disorder.

In psychotherapy (commonly, cognitive-behavioral therapy for ADHD), the child can be helped to talk about upsetting thoughts and feelings, explore self-defeating patterns of behaviour, learn alternative ways to handle emotions, feel better about him or herself despite the disorder, identify and build on their strengths, answer unhealthy or irrational thoughts, cope with daily problems and control their attention and aggression. Such therapy can also help the family to handle the disruptive behaviors better , promote change, develop techniques for coping with and improving their child's behaviour.

Behavioural therapy is a specific type of psychotherapy that focuses more on ways to deal with immediate issues. It tackles thinking and coping patterns directly, without trying to understand their origins. The aim is behaviour change, such as organizing tasks or schoolwork in a better way, or dealing with emotionally charged events when they occur. In behaviour therapy, the child may be asked to monitor their actions and give themselves rewards for positive behaviours such as stopping to think through the situation before reacting.

Social Skills Training for ADHD

Social skills training teaches the behaviors necessary to develop and maintain good social relationships, such as waiting for a turn, sharing toys, asking for help or certain ways of responding to teasing.

Parenting Skills Training for ADHD

Suggestions to help children with ADHD with organizing:

- Have the same schedule every day, from the moment the child wakes up until they go to sleep. The routine includes homework time and playtime. Keep it written down somewhere prominent, like the refrigerator door or a notice board. Changes should be planned well in advance.
- Use organizers for homework and other activities which need to be given thought. This will highlight the importance of writing assignments down and gathering the necessary books. Keep everyday items in the same place, so that they are easily found- "a place for everything and everything in its place"- Including clothing, bags and school items.

When consistent rules are in place, the child with ADHD is more likely to understand and follow them, at which point small rewards can be given. This may work particularly well if the child has previously become used to criticism.

Psychotherapy for Adults with ADHD

Psychotherapy can provide an opportunity to explore emotions related to ADHD, such as anger that the problem was not diagnosed much earlier. It may boost self-esteem through improved self-awareness and compassion. Psychotherapy can provide support during the changes brought about through medication, conscious efforts to alter behavior and limit any destructive consequences of ADHD.

It may be a good idea to set up systems involving well-planned calendars, diaries, lists, notes and official locations for important items such as keys and wallets. Paperwork systems can help reduce the potential confusion of bills and other vital documents and correspondence. Such routines will give a sense of order and achievement

Source

An Introduction to ADD/ADHD, available from

http://psychcentral.com/disorders/adhd

Compiled by Dr. Madhava Gunasekera of the Epidemiology Unit

Table 1: Vaccine-preventable Diseases & AFP

03rd – 9th March 2012 (10th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2012	Number of cases during same week in 2011	Total number of cases to date in 2012	Total number of cases to date in 2011	Difference between the number of cases to date in 2012 & 2011
	W	C	S	N	E	NW	NC	U	Sab					
Acute Flaccid Paralysis	00	00	00	01	01	00	00	00	00	02	02	15	21	- 28. 6 %
Diphtheria	00	00	00	00	00	00	00	00	00	-	-	-	-	-
Measles	00	00	00	00	00	01	00	01	00	02	05	12	20	- 30.0 %
Tetanus	00	00	00	00	00	00	00	00	00	00	00	02	04	- 50.0 %
Whooping Cough	00	00	01	00	00	00	00	00	00	01	00	19	06	+ 216.7 %
Tuberculosis	194	00	12	08	15	00	00	13	02	244	314	1755	1863	- 05.8 %

Table 2: Newly Introduced Notifiable Disease

03rd – 9th March 2012 (10th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2012	Number of cases during same week in 2011	Total number of cases to date in 2012	Total number of cases to date in 2011	Difference between the number of cases to date in 2012 & 2011
	W	C	S	N	E	NW	NC	U	Sab					
Chickenpox	21	06	20	05	10	12	05	04	13	96	114	1041	1040	+ 0.09 %
Meningitis	02 CB=1 KL=1	01 KN=1	00	00	01 BT=1	05 PU=1 KR=4	02 PO=1 AP=1	00	01 RP=1	12	15	143	208	+ 31.2 %
Mumps	06	04	08	00	10	06	15	05	06	60	51	813	419	+ 94.03 %
Leishmaniasis	02 CB=1 KL=1	00	09 MT=1 HB=8	00	00	01 KN=1	03 PO=3	00	00	15	22	174	125	+ 39.2 %

Key to Table 1 & 2

Provinces: **W**: Western, **C**: Central, **S**: Southern, **N**: North, **E**: East, **NC**: North Central, **NW**: North Western, **U**: Uva, **Sab**: Sabaragamuwa.

DPDHS Divisions: **CB**: Colombo, **GM**: Gampaha, **KL**: Kalutara, **KD**: Kandy, **ML**: Matale, **NE**: Nuwara Eliya, **GL**: Galle, **HB**: Hambantota, **MT**: Matara, **JF**: Jaffna, **KN**: Killinochchi, **MN**: Mannar, **VA**: Vavuniya, **MU**: Mullaitivu, **BT**: Batticaloa, **AM**: Ampara, **TR**: Trincomalee, **KM**: Kalmunai, **KR**: Kurunegala, **PU**: Puttalam, **AP**: Anuradhapura, **PO**: Polonnaruwa, **BD**: Badulla, **MO**: Moneragala, **RP**: Ratnapura, **KG**: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps.

Special Surveillance: Acute Flaccid Paralysis.

Leishmaniasis is notifiable only after the General Circular No: 02/102/2008 issued on 23 September 2008. .

Dengue Prevention and Control Health Messages

To prevent dengue, remove mosquito breeding places in and around your home, workplace or school once a week.

Table 4: Selected notifiable diseases reported by Medical Officers of Health

03rd – 9th March 2012 (10th Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Returns Received
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	75	1975	0	27	0	4	3	53	0	12	1	24	0	1	2	17	0	1	**77**
Gampaha	46	1537	0	22	0	1	1	17	0	0	4	37	0	4	3	58	0	1	**67**
Kalutara	30	510	2	27	0	2	0	12	0	3	4	43	0	1	0	6	0	0	**69**
Kandy	21	501	2	19	0	0	1	8	0	4	1	21	7	47	1	4	0	0	**100**
Matale	10	108	1	24	0	2	0	6	0	3	0	9	0	2	0	5	0	0	**83**
Nuwara	10	75	3	25	0	1	2	9	0	0	4	9	3	19	1	7	0	0	**85**
Galle	22	273	0	25	0	1	0	6	0	4	0	21	2	11	0	1	0	0	**100**
Hambantota	7	139	0	9	0	0	0	2	0	5	1	16	0	17	0	3	0	0	**75**
Matara	30	404	6	20	0	3	0	9	0	10	7	30	5	29	0	44	0	0	**100**
Jaffna	16	156	7	53	1	4	9	136	0	8	0	2	6	219	0	2	0	0	**92**
Kilinochchi	0	11	0	6	0	0	0	10	0	39	0	2	0	18	0	1	0	1	**75**
Mannar	1	57	0	7	0	1	0	7	0	8	1	11	2	21	0	1	0	0	**100**
Vavuniya	1	20	1	4	0	12	0	2	0	3	0	14	0	0	0	1	0	0	**100**
Mullaitivu	0	3	0	4	0	1	0	3	0	1	0	2	0	4	0	0	0	0	**50**
Batticaloa	14	414	4	38	0	0	0	5	0	5	0	4	0	0	0	3	0	1	**93**
Ampara	1	26	0	26	0	0	0	2	0	0	0	11	0	0	0	1	0	0	**57**
Trincomalee	3	53	0	36	0	1	2	13	0	1	2	15	0	1	0	1	0	0	**100**
Kurunegala	13	326	2	35	1	5	1	30	0	6	1	39	0	14	1	15	0	1	**91**
Puttalam	12	256	0	20	0	2	0	2	0	1	0	12	0	7	0	0	0	0	**75**
Anuradhapu	7	93	3	21	0	0	0	1	00	1	0	31	1	11	2	19	0	0	**74**
Polonnaruw	2	56	0	10	0	0	1	1	0	0	2	13	0	2	0	5	0	1	**71**
Badulla	1	63	1	24	0	2	1	8	0	1	1	10	2	11	1	13	0	0	**88**
Monaragala	5	51	3	17	0	1	0	7	0	0	2	23	5	28	7	24	0	0	**91**
Ratnapura	28	329	11	66	0	16	0	13	0	2	1	86	1	9	0	34	0	0	**89**
Kegalle	16	347	1	23	0	2	0	10	0	5	2	26	0	11	4	145	0	0	**91**
Kalmune	2	101	3	61	0	0	1	5	2	6	0	1	0	0	1	3	0	1	**85**
SRI LANKA	**373**	**7884**	**50**	**649**	**02**	**61**	**22**	**377**	**02**	**128**	**34**	**512**	**34**	**487**	**23**	**413**	**00**	**07**	**86**

Source: Weekly Returns of Communicable Diseases WRCD).
***Dengue Fever / DHF** refers to Dengue Fever / Dengue Haemorrhagic Fever.
****Timely** refers to returns received on or before 09th March, 2012 Total number of reporting units 329. Number of reporting units data provided for the current week: 283
A = Cases reported during the current week. **B** = Cumulative cases for the year.

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to **chepid@sltnet.lk.**

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