WEEKLY EPIDEMIOLOGICAL REPORT
A publication of the Epidemiological Unit,
Ministry of Healthcare & Nutrition
231, de Saram Place,Colombo 01000, Sri Lanka
Tele:(+94-011)2695112,Fax:(+94,011) 2696583,E-Mail:epidunit@sltnet.lk
Epidemiologist:(+94-011) 2681548,E-mail:chepid@sltnet.lk

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CHILDREN LIVING WITH HIV/AIDS - Part II

The Part I of this article was published in the last issue of the Weekly Epidemiological Report

The problems for children living with HIV

Once children are infected with HIV, they face a high chance of illness and death, unless they can successfully be provided with treatment. Antiretroviral treatment slows the progress of HIV infection and allows infected children to live much longer, healthier lives. Sadly, the vast majority of children who could benefit from this therapy – an estimated 90% – are not receiving it. A major problem is that only a few appropriate drugs are available. Young children ideally need to be given drugs in the form of syrups or powders, because they cannot swallow tablets. Sadly, most of the drugs that work well in children are only available as tablets. As a result, careers are often forced to break adult tablets into smaller doses for their children, which can lead to children being given too little or too much of a drug.

There are numerous other problems that are stopping children from accessing antiretroviral drugs – for instance, high drug prices and the lack of healthcare workers trained to treat children.

Another major problem for children living with HIV is childhood illnesses, such as mumps and chickenpox. These illnesses can affect all children, but since children living with HIV have such weak immune systems they may find that these illnesses are more frequent, last longer, and do not respond as well to treatment. Opportunistic infections, such as Tuberculosis and PCP (a form of pneumonia), are also a serious risk to the health of children living with HIV.

Helping children living with HIV

The first step to helping a children who are infected with HIV are to diagnose them, through HIV testing. It is important that HIV-positive children are diagnosed as quickly as possible, so that – where feasible – they can be provided with appropriate medication and care. However, testing children for HIV can be complicated, especially for those recently born to HIV-positive mothers. Antibody tests, which are used to diagnose HIV in adults, are ineffective in children below the age of 18 months. Instead, children below this age are usually diagnosed through polymerase chain reaction (PCR) testing and other specialist techniques. Since these methods require expensive laboratory equipment and specially trained staff, they are generally unobtainable in the resource-poor areas where they are needed the most.

Recently, the use of 'dried blood spot' testing has brought some hope to the situation. This method allows small samples of blood to be collected on paper, and sent away to a laboratory where PCR (or similar testing) is available.

Once a child has been diagnosed, they ideally need to be carefully monitored and provided with antiretroviral drugs. Even in resource-poor areas where antiretroviral syrups and powders are unavailable, studies suggest that breaking down adult tablets into smaller doses can work effectively – although this should only really be seen as a last resort. Children who are treated successfully may be able to live relatively health

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lives. Childhood illnesses can be avoided through vaccines, immunization and good nutrition.

Most routine-vaccines are safe in children living with HIV and are strongly recommended, although 'live vaccines' (where a weakened or killed version of a virus is injected, so that the body builds up an immunity to it) are not generally considered safe.

Opportunistic infections can be prevented using drugs such as cotrimoxazole: a cheap antibiotic that has been proven to significantly reduce the rate of illness and death among HIV-positive children.

Children living with HIV have many practical and material needs, but they also have social, emotional and psychological needs. It is therefore important that emotional care is provided to all children affected by HIV, including those who have lost parents or relatives to AIDS. There are particular stages of a HIV-positive child's life when meeting these needs can be particularly important: the times when they are first diagnosed, start to receive treatment, have to deal with discrimination, experience problems adhering to drugs, or have to deal with end-of-life issues. They may also face trauma as a result of one or both of their parents dying from AIDS, since there is a highly likelihood that their mother, at least, is infected.

It is ultimately up to the families, friends, caregivers and healthcare workers involved to provide emotional support, but governments and organizations also have a responsibility to address the wider problems that may prevent communities from meeting children's needs. Through services, programmes and protective legislation, governments can ensure that families and carers have the security that they need to care for children.

The effects of HIV on children's families : With an estimated 37.2 million adults living with HIV around the world, large numbers of children have family members living with HIV, or who have died of AIDS. These children may themselves experience the discrimination that is often associated with HIV. They may also have to care for a sick parent or relative, and may have to give up school to become the principle wage-earner for the family. When adults fall sick, food still needs to be provided –– and the burden of earning money usually falls on the oldest child.

One of the harshest effects of the global AIDS epidemic is the number of orphans it has created, and continues to create. By the end of 2005, it is estimated that more than 15 million children had lost one or more of their parents as a result of AIDS. Some AIDS orphans are adopted by grandparents or other extended family-members, but many are left without any support. Child-headed households as a result of AIDS are common in some areas, with older children fending for their siblings and themselves.

Helping families There are two main things that can be done to help families cope with the burden of HIV. The first is to provide treatment to family-members who are infected.

The second thing that can be done is to provide family members who are not infected with HIV with knowledge and resources – such as condoms – that can help them to stay uninfected.

Children who have lost their parents as a result of AIDS may be in particular need of support and care. Many organisations focus on providing care and support to AIDS orphans and other children made vulnerable by HIV and AIDS. This may involve providing food, clothing, help with looking after siblings or sick family members, and help to ensure that children are able to attend school. Ideally, campaigns need to prevent such children becoming orphaned in the first place, by keeping their parents alive through treatment. Parents who are receiving antiretroviral drugs can work, earn a wage and provide financial support and emotional care to their children.

The effects of HIV on children's communities HIV and AIDS have held back development and economic growth in many of the world's poorest communities. For the children growing up in these communities – even those who are uninfected, and who have no family members that are infected - HIV and AIDS are negatively affecting their lives.

In areas where there is a high rate of sickness and mortality due to HIV and AIDS, it is often difficult to provide essential services to children. One of the most important services that children need is healthcare.

What needs to be done? : It is clear that much more needs to be done, especially in resource-poor countries. Many children are dying, whilst millions more are experiencing the scars that AIDS can leave on their lives –– almost all of which are avoidable. Medical treatment is such that, in a developed country, a woman living with HIV can now be almost certain that her child will not be infected - and yet there are still delays in making the appropriate tests and drugs available around the world.

If infected with HIV, children can be effectively treated, and, given this treatment, can have longer, healthier lives – yet they continue to die, because the antiretroviral drugs are still not widely available in many countries. Developing countries need not only the drugs to treat children, but also specialist training for staff, and funding to enable treatment and ongoing care. The world's political leaders and decision-makers already have these tools to save children from needless suffering, but they are still not reaching most of those who need them.

Source : 1. AIDS & HIV information from AVERT. Org
[F:\AIDS\HIV, AIDS and children. htm]
2. UNAIDS/WHO (2007, December), AIDS Epidemic Update

Table 1: Vaccine-preventable Diseases & AFP

1st – 7th December 2007 (49th Week)

Disease	No. of Cases by Province								Number of cases during current week in 2007	Number of cases during same week in 2006	Total number of cases to date in 2007	Total number of cases to date in 2006	Difference between the number of cases to date between 2007 & 2006
	W	C	S	NE	NW	NC	U	Sab					
Acute Flaccid Paralysis	00	00	01 GL=1	00	00	00	00	00	01	01	83	116	-28.4%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00.0%
Measles	00	00	00	00	00	00	00	00	00	00	77	39	+97.4%
Tetanus	00	00	00	00	00	00	00	00	00	04	32	46	-30.4%
Whooping Cough	00	00	00	00	00	00	00	00	00	00	45	70	-35.7%
Tuberculosis	61	170	09	07	15	25	00	23	310	113	9340	9441	-1.1`%

Table 2: Diseases under Special Surveillance

1st – 7th December 2007 (49th Week)

Disease	No. of Cases by Province								Number of cases during current week in 2007	Number of cases during same week in 2006	Total number of cases to date in 2007	Total number of cases to date in 2006	Difference between the number of cases to date between 2007 & 2006
	W	C	S	NE	NW	NC	U	Sab					
DF/DHF*	114	17	14	04	54	08	06	13	235	333	6524	11119	-41.3%
Encephalitis	00	00	01 MT=1	00	01 PU=1	00	01 BD=1	01 KG=1	04	01	190	114	+66.7%
Human Rabies	00	00	00	00	01 KR=1	00	00	00	01	00	58	71	-18.3%

Table 3: Newly Introduced Notifiable Diseases

1st – 7th December 2007 (49th Week)

Disease	No. of Cases by Province								Number of cases during current week in 2007	Total number of cases to date in 2007
	W	C	S	NE	NW	NC	U	Sab		
Chickenpox	12	04	06	08	05	03	11	06	55	3213
Meningitis	11 GM=8 **CO=1** KL=2	00	05 GL=3 HB=2	00	01 PU=2	02 PO=2	02 MO=2	04 RP=3 KG=1	25	714
Mumps	08	02	04	15	11	05	00	02	47	2072

*__DF / DHF__ refers to Dengue Fever / Dengue Haemorrhagic Fever.
NA= Not Available.
Sources:
Weekly Return of Communicable Diseases:
Diphtheria, Measles, Tetanus, Whooping Cough, Human Rabies, Dengue Haemorrhagic Fever, Japanese Encephalitis, Chickenpox, Meningitis, Mumps.
Special Surveillance:
Acute Flaccid Paralysis.
National Control Program for Tuberculosis and Chest Diseases:
Tuberculosis.
Details by districts are given in Table

Provinces: W=Western, C=Central, S=Southern, NE=North & 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.

Table 4: Laboratory Surveillance of Dengue Fever

1st – 7th December 2007 (49th Week)

Samples	Number tested	Number positive *	Serotypes				
			D_1	D_2	D_3	D_4	Negative
Number for current week	06	01	00	01	00	00	00
Total number to date in 2007	467	52	01	25	16	00	09

Source: Genetech Molecular Diagnostics & School of Gene Technology, Colombo. * Not all positives are subjected to serotyping.

Table 5: Selected notifiable diseases reported by Medical Officers of Health

1st - 7th December 2007 (49th Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Returns Received Timely**
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	71	1685	06	345	00	11	10	110	01	76	08	147	00	05	03	146	**77**
Gampaha	32	858	01	314	00	27	02	79	00	61	08	278	01	19	01	203	**93**
Kalutara	11	385	11	468	00	05	04	58	00	43	10	189	00	02	00	63	**82**
Kandy	08	394	09	303	00	03	01	63	00	15	12	127	04	81	04	1958	**68**
Matale	08	109	06	242	00	06	01	33	00	13	19	112	00	05	02	138	**83**
Nuwara Eliya	01	38	00	233	00	02	05	119	00	368	00	13	01	36	03	548	**100**
Galle	02	94	01	167	00	12	00	25	00	42	16	134	00	27	00	23	**69**
Hambantota	01	91	04	189	00	06	00	21	00	20	01	48	02	64	01	29	**91**
Matara	11	223	02	290	01	10	05	49	00	24	11	273	06	209	01	34	**88**
Jaffna	00	211	00	167	00	02	00	425	00	13	00	00	00	105	00	23	**00**
Kilinochchi	00	01	00	01	00	00	00	06	00	00	00	00	00	02	00	04	**50**
Mannar	00	07	00	32	00	00	03	97	00	00	00	02	00	00	00	24	**75**
Vavuniya	03	38	02	78	00	04	00	21	00	65	00	03	00	00	01	14	**100**
Mullaitivu	00	00	00	39	00	08	00	21	00	01	00	00	00	00	01	17	**80**
Batticaloa	00	77	02	471	00	10	00	22	00	10	00	00	00	22	02	1159	**64**
Ampara	00	04	17	177	00	00	01	05	00	02	02	07	00	01	02	36	**57**
Trincomalee	01	61	11	303	00	04	00	30	00	25	01	12	02	21	03	116	**67**
Kurunegala	23	725	18	499	00	08	00	68	03	37	05	81	00	37	04	102	**78**
Puttalam	31	276	11	204	01	17	02	95	00	09	03	31	00	07	00	80	**89**
Anuradhapura	06	232	07	181	00	10	00	22	00	17	02	28	00	19	00	42	**68**
Polonnaruwa	02	67	11	153	00	03	00	14	00	64	00	22	00	00	02	51	**86**
Badulla	06	74	10	598	01	06	08	95	02	13	00	46	03	167	15	383	**80**
Monaragala	00	47	15	341	00	02	01	55	00	37	00	46	02	86	00	45	**80**
Ratnapura	05	403	06	582	00	20	01	75	00	24	02	80	02	31	00	104	**69**
Kegalle	13	417	00	292	01	11	03	66	01	09	05	220	01	44	05	253	**73**
Kalmunai	00	07	04	226	00	03	00	09	00	10	00	02	00	02	01	129	**62**
SRI LANKA	**235**	**6524**	**157**	**6895**	**04**	**190**	**47**	**1683**	**07**	**998**	**105**	**1901**	**24**	**992**	**51**	**5724**	**74**

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 15 December. 2007. Total number of reporting units =290. Number of reporting units data provided for the current week: 238

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ON STATE SERVICE

Dr. M. R. N. ABEYSINGHE
EPIDEMIOLOGIST
EPIDEMIOLOGICAL UNIT
231, DE SARAM PLACE
COLOMBO 10