



WEEKLY EPIDEMIOLOGICAL REPORT

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CHILDREN LIVING WITH HIV/AIDS - Part I

Started on 1st December 1988, World AIDS Day is not just about raising money, but also about increasing awareness, fighting prejudice and improving education. World AIDS Day is important in reminding people that HIV has not gone away, and that there remain many things still to be done

The 2007 World AIDS Day theme, "leadership", highlights the need for innovation, vision and perseverance in the face of the AIDS challenge. The campaign calls on all sectors of society such as families, communities and civil society organisations - rather than just governments - to take the initiative and provide leadership on AIDS.

Since the beginning of the HIV/AIDS epidemic, significant advances in response to HIV have been achieved when there is strong and committed leadership. Leaders are distinguished by their action, innovation and vision; their personal example and engagement of others; and their perseverance in the face of obstacles and challenges. However, leaders are often not those in the highest offices. Leadership must be demonstrated at every level to get ahead of the disease - in families, in communities, in countries

According to UNAIDS estimates, there are now 33.2 million people living with HIV, including 2.5 million children. During 2007 some 2.5 million people became newly infected with the virus. Around half of all people who become infected with HIV do so before they are 25 and are killed by AIDS before they are 35.

Around 95% of people with HIV/AIDS live in developing nations. But HIV today is a threat

to men, women and children on all continents around the world. The human immunodeficiency virus (HIV) is a retrovirus that infects cells of the human immune system, destroying or impairing their function. In the early stages of infection, the person has no symptoms. However, as the infection progresses, the immune system becomes weaker, and the person becomes more susceptible to so-called opportunistic infections.

The most advanced stage of HIV infection is acquired immunodeficiency syndrome (AIDS). It can take 10-15 years for an HIV-infected person to develop AIDS; antiretroviral drugs can slow down the process even further.

HIV is transmitted through unprotected sexual intercourse (anal or vaginal), transfusion of contaminated blood, sharing of contaminated needles, and between a mother and her infant during pregnancy, childbirth and breastfeeding.

Vast numbers of children across the world become infected with HIV every year. Without treatment, thousands die as a result of AIDS. In addition, millions more children who are not infected with HIV are *indirectly* affected by the epidemic, as a result of the death and suffering that AIDS causes in their families and their communities.

Despite the severity of this situation, many people still think of AIDS as something that affects adults. Some people occasionally think of 'AIDS babies', and children who have lost one or both of their parents to AIDS - AIDS orphans - are sometimes in the media. But since HIV, the virus that causes AIDS, is commonly transmitted through sex or drug use, people do not really

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think of it affecting children. It does, though – and millions of children around the world continue to have their lives damaged by HIV. Most children living with HIV – around 9 out of 10 – live in Sub-Saharan Africa, the region of the world where AIDS has taken its greatest toll. Large numbers of children with HIV also live in the Caribbean, Latin America and South East Asia. Around 90% of all children living with HIV have acquired the infection from their mothers during pregnancy, birth or breastfeeding.

In Africa, studies suggest that one in three newborns infected with HIV die before the age of one, over half die before reaching their second birthday, and most are dead before they are five years old. Conversely, in developed countries, preventive measures ensure that the transmission of HIV from mother to child is relatively rare, and in those cases where it does occur, a range of treatment options means that the child can survive – often into adulthood. This shows that with funding, trained staff and resources, the infections and deaths of many children in lower-income countries might easily be avoided. Because every child today is growing up in a world where AIDS is a devastating reality, some people say that every child is affected by the epidemic, whether they are infected or not. Others talk specifically about children who have been orphaned, or those who are HIV-positive. Regardless of how people look at the situation, it is clear that there are many ways in which a child can be affected by HIV, and that it is not only those who are infected that are suffering as a result of the epidemic. HIV can damage a child's life in three main ways: through its effects directly on the child, on that child's family, and on the community that the child is growing up in

The problems for children

Mother to child transmission of HIV accounts for the vast majority of children who are infected with HIV. If a woman already has HIV then her baby may become infected during pregnancy or delivery. HIV can also be transmitted through breast-milk.

Aside from mother-to-child transmission, some children are exposed to HIV in medical settings; for instance, through needles that have not been sterilized or blood transfusions where infected blood is used. In wealthier countries this problem has virtually been eliminated, but in resource-poor communities it is still an issue. For older children, sexual activity and drug use present a risk.

It is well known that many young people start to have sex before they have reached the age of consent, and in some cases children make the decision to have sex of their own accord. In other cases, however, children are exposed to HIV through sexual abuse and rape. This is a significant problem in many areas. For instance, in parts of Africa, the myth that HIV can be cured through sex with a virgin has led to a large number of rapes – sometimes of very young children – by infected men. In some cases, young children are coerced into

sex work, which can put them at a very high risk of becoming infected with HIV.

Helping children

The main way to stop children becoming infected is to prevent mother-to-child-transmission. Mother to child transmission of HIV is almost entirely avoidable, given appropriate interventions. These measures (which include the giving antiretroviral drugs to a mother during pregnancy, and to her child once it is born) can reduce the risk of mother-to-child transmission from 20-45% to less than 2%. In developed countries, such interventions have minimized the number of children being born with HIV.

Unfortunately, prevention of mother-to-child-transmission (PMTCT) services fail to reach most women in resource-poor countries. In 2005, only 9% of pregnant women in resource poor countries were offered any sort of prevention services.

The use of sterile medical equipment and screened blood products can help to prevent children becoming infected through medical transmission. In Romania, more than 10,000 new babies and young children were infected with HIV from contaminated injections and unsterilized blood transfusions between 1987 and 1991. This country serves to illustrate not only how vulnerable children are to infection in a medical setting, but also how a country can respond to these problems. The large number of HIV-positive children in Romania prompted the government to roll out antiretroviral treatment, which today reaches almost all of those in need. Sterile medical equipment is used, and blood-products are now screened for HIV.

In regards to preventing infection through sexual activity and drug use, the most effective thing that can be done is to prevent children from having sex or from using drugs – things that are illegal anyway in most countries.

This, however, is not always possible, and legislators and educators need to accept that some children are always going to have sex or use drugs, even if they are told not to. All children and young people should receive effective sexual health and HIV education so that they know how to avoid pregnancy and sexually transmitted infections, including HIV. Educators must also accept that children are likely to be exposed to drugs at some point in their lives - and that they therefore need to be taught how to protect themselves from HIV infection and other dangers associated with drug use.

Source :

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

Part II of this article on “ Children living with HIV/AIDS” will be continued in the next issue.

Table 1: Vaccine-preventable Diseases & AFP

24th - 30th November 2007 (48th 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 | 01 NE=1 | 00 | 00 | 01 KR=1 | 00 | 02 BD=2 | 01 RP=1 | 05 | 00 | 82 | 115 | -28.7% |
| Diphtheria | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00.0% |
| Measles | 00 | 01 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 77 | 39 | +97.4% |
| Tetanus | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 32 | 42 | -23.8% |
| Whooping Cough | 00 | 00 | 00 | 00 | 01 PU=1 | 00 | 00 | 00 | 01 | 00 | 45 | 70 | -35.7% |
| Tuberculosis | 67 | 00 | 03 | 16 | 00 | 00 | 00 | 72 | 158 | 174 | 9030 | 9328 | -3.2% |

Table 2: Diseases under Special Surveillance

24th - 30th November 2007 (48th 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* | 86 | 09 | 12 | 11 | 31 | 05 | 04 | 13 | 171 | 329 | 6259 | 10731 | -41.7% |
| Encephalitis | 02 GM=2 | 00 | 00 | 00 | 01 PU=1 | 00 | 00 | 00 | 03 | 00 | 186 | 112 | +66.1% |
| Human Rabies | 01 KL=1 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 04 | 57 | 71 | -19.7% |

Table 3: Newly Introduced Notifiable Diseases

24th - 30th November 2007 (48th 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 | 17 | 03 | 07 | 06 | 05 | 02 | 05 | 07 | 52 | 3154 |
| Meningitis | 02 GM=2 | 00 | 02 MT=1 HB=1 | 04 VA=1 BT=2 AM=1 | 02 PU=2 | 00 | 03 BD=1 MO=2 | 00 | 13 | 688 |
| Mumps | 04 | 00 | 00 | 10 | 03 | 00 | 01 | 09 | 27 | 2018 |

* 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 24th - 30th November 2007 (48th 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
24th - 30th November 2007 (48th 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 | 44 | 1611 | 03 | 338 | 00 | 11 | 05 | 100 | 00 | 75 | 05 | 139 | 00 | 05 | 02 | 143 | 69 |
| Gampaha | 33 | 826 | 07 | 313 | 02 | 27 | 04 | 77 | 05 | 61 | 05 | 269 | 00 | 18 | 01 | 202 | 86 |
| Kalutara | 09 | 374 | 02 | 454 | 00 | 05 | 01 | 54 | 00 | 43 | 07 | 179 | 00 | 02 | 01 | 63 | 91 |
| Kandy | 06 | 386 | 05 | 294 | 00 | 03 | 00 | 62 | 00 | 15 | 09 | 115 | 02 | 77 | 03 | 1954 | 91 |
| Matale | 03 | 101 | 03 | 236 | 00 | 06 | 00 | 32 | 00 | 13 | 15 | 93 | 00 | 05 | 02 | 136 | 83 |
| Nuwara Eliya | 00 | 37 | 03 | 233 | 00 | 02 | 02 | 114 | 00 | 368 | 01 | 13 | 00 | 33 | 03 | 545 | 86 |
| Galle | 03 | 92 | 05 | 166 | 00 | 12 | 01 | 25 | 00 | 42 | 13 | 118 | 00 | 27 | 00 | 23 | 88 |
| Hambantota | 00 | 88 | 02 | 184 | 00 | 06 | 00 | 21 | 00 | 20 | 02 | 47 | 03 | 59 | 00 | 25 | 73 |
| Matara | 09 | 212 | 05 | 288 | 00 | 09 | 02 | 44 | 00 | 24 | 04 | 262 | 02 | 203 | 00 | 33 | 94 |
| Jaffna | 07 | 203 | 01 | 164 | 00 | 02 | 03 | 414 | 00 | 13 | 00 | 00 | 01 | 104 | 00 | 23 | 75 |
| Kilinochchi | 00 | 01 | 00 | 01 | 00 | 00 | 00 | 06 | 00 | 00 | 00 | 00 | 00 | 02 | 00 | 04 | 25 |
| Mannar | 00 | 07 | 04 | 32 | 00 | 00 | 03 | 94 | 00 | 00 | 00 | 02 | 00 | 00 | 00 | 24 | 75 |
| Vavuniya | 04 | 35 | 06 | 76 | 00 | 04 | 00 | 21 | 05 | 65 | 00 | 03 | 00 | 00 | 00 | 13 | 100 |
| Mullaitivu | 00 | 00 | 00 | 34 | 00 | 08 | 00 | 21 | 00 | 01 | 00 | 00 | 00 | 00 | 00 | 16 | 40 |
| Batticaloa | 00 | 76 | 02 | 467 | 00 | 10 | 01 | 22 | 00 | 10 | 00 | 00 | 00 | 22 | 08 | 1155 | 55 |
| Ampara | 00 | 04 | 14 | 160 | 00 | 00 | 00 | 04 | 00 | 02 | 02 | 05 | 00 | 01 | 02 | 34 | 71 |
| Trincomalee | 00 | 60 | 16 | 287 | 00 | 04 | 00 | 30 | 00 | 25 | 00 | 10 | 00 | 18 | 00 | 113 | 44 |
| Kurunegala | 12 | 700 | 07 | 481 | 00 | 08 | 04 | 68 | 00 | 34 | 05 | 76 | 00 | 37 | 01 | 98 | 83 |
| Puttalam | 19 | 239 | 10 | 191 | 01 | 16 | 01 | 91 | 00 | 09 | 00 | 28 | 00 | 07 | 00 | 79 | 56 |
| Anuradhapura | 04 | 225 | 05 | 162 | 00 | 10 | 00 | 22 | 00 | 17 | 01 | 26 | 00 | 19 | 00 | 42 | 58 |
| Polonnaruwa | 01 | 65 | 09 | 142 | 00 | 03 | 00 | 14 | 00 | 64 | 00 | 22 | 00 | 00 | 00 | 49 | 71 |
| Badulla | 02 | 68 | 14 | 588 | 00 | 05 | 00 | 87 | 00 | 11 | 00 | 46 | 02 | 164 | 34 | 367 | 93 |
| Monaragala | 02 | 47 | 08 | 326 | 00 | 02 | 00 | 54 | 00 | 37 | 01 | 46 | 02 | 84 | 00 | 45 | 80 |
| Ratnapura | 10 | 392 | 05 | 575 | 00 | 20 | 00 | 74 | 00 | 24 | 03 | 78 | 03 | 29 | 01 | 104 | 69 |
| Kegalle | 03 | 403 | 07 | 289 | 00 | 10 | 00 | 63 | 00 | 08 | 05 | 213 | 01 | 43 | 03 | 246 | 64 |
| Kalmunai | 00 | 07 | 02 | 220 | 00 | 03 | 00 | 09 | 00 | 10 | 00 | 02 | 00 | 02 | 00 | 128 | 62 |
| SRI LANKA | 171 | 6259 | 145 | 6701 | 03 | 186 | 27 | 1623 | 10 | 991 | 78 | 1792 | 16 | 961 | 61 | 5664 | 75 |

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

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