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Field Epidemiology & Disease Surveillance Division
Ministry of National Health Services, Regulations & Coordination

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National Focal Point for International Health Regulations

Advisory for the Prevention and Control of HIV/AIDS

Purpose of the Advisory:

The recent detection of over 700 HIV positive cases in North Sindh has highlighted gross inadequacies in the healthcare system especially with regards to the infection control practices. Analysis of the cases testing positive on Rapid Diagnostic Kit reveals that the infection is disproportionately affecting younger population (Median age: 4.5 years). Scientific investigations are currently underway to ascertain the causative factors however, the involvement of young kids born to HIV negative Mothers points to a significant role being played by the poor Infection Prevention & Control practices, Injection malpractice and the reuse of contaminated syringes.

The event demands vigilance all across as many of the potential contributing factors of disease propagation in general population may be common in other parts of the country. The objective of this advisory is therefore, to alert the public health authorities throughout the country, to undertake necessary steps for prevention and control of HIV/AIDS and other sexually transmitted infections propagated by the unsterile equipment, syringes as well as blood transfusion.

Basic Information:

The human immunodeficiency virus (HIV) belongs to a subset of viruses called 'retroviruses'. It is of 2 types; *HIV-1* being the dominant, more virulent and more infectious while *HIV-2* is less pathogenic than *HIV-1* and is largely confined to West Africa.

HIV can be transmitted from person to person through:

- Unprotected sexual intercourse (vaginal or anal) with an infected partner,
- Contaminated needles, syringes and/or other sharp injecting equipment.
- Infected mother to her infant during pregnancy, childbirth and through breastfeeding
- Transfusion of HIV infected blood and blood products

Once in the bloodstream, this retrovirus infects CD4 cells (a type of T cell) and results in progressive deterioration of the immune system, leading to "immune deficiency."

A person is said to have AIDS when the infection progresses dropping the CD4 count below 200 resulting in appearance of one or more opportunistic infections. On average, the time from HIV infection to clinical AIDS is 8 to 10 years, though AIDS may be manifested in less than 2 years or be delayed in onset beyond 10 years.

Case Definition of a Confirmed HIV infected case:

In adults and children 18 months or older, HIV infection diagnosis is based on:

Positive HIV antibody testing on rapid or laboratory-based enzyme immunoassay, which is confirmed by a second HIV antibody test (rapid or laboratory-based enzyme immunoassay) relying on different antigens or of different operating characteristics; re-confirmed by a third test (rapid or laboratory-based enzyme immunoassay)

and/or;

Positive virological test for HIV or its components (HIV-RNA or HIV-DNA or ultrasensitive HIV p24 antigen) confirmed by a second virological test obtained from a separate determination.

HIV infection in Children younger than 18 months:

Positive virological test for HIV or its components (HIV-RNA or HIV-DNA or ultrasensitive HIV p24 antigen) confirmed by a second virological test obtained from a separate determination taken more than four weeks after birth.

(Positive HIV antibody testing is not recommended for definitive or confirmatory diagnosis of HIV infection in children until 18 months of age)

Case Definition for AIDS:

Diagnosis in Adults and children above 5 years:

Diagnosis of AIDS is based on WHO clinical stages 3 and 4 and/or; Immunological criteria for diagnosing advanced HIV in adults and children five years or older with confirmed HIV infection: CD4 count less than 350 per 3 ml of blood in an HIV-infected adult or child. and/or;

Immunological criteria for diagnosing advanced HIV in a child younger than five years of age with confirmed HIV infection:

CD4 less than 30 % those younger than 12 months

CD4 less than 25 % in those younger than 12-35 months

CD4 less than 20 % in those younger than 36-59 months

Diagnosis:

- Collect 5 ml of blood/serum observing standard plus contact precautions.
- For sero-diagnosis refrigerate specimen at 4^oc then transport to lab. Transport specimens with complete lab request form along with Biohazard label within 24-28 hrs of collection maintaining cold chain (preferably).
- For antigen detection by PCR immediately freeze the specimen at -20 °C if delay is anticipated. Lab confirmation of HIV is done by detecting HIV antibody in serum samples using Enzyme-linked immunoassay (ELISA or EIA) or WHO-recommended three rapid tests.
- When the first test is positive, it must be confirmed with two other tests that are methodologically and/or antigenically independent. If either the second or third assay is non-reactive, the case is "Indeterminate.
- For neonates, viral load determination is required for confirmation

Management of HIV/AIDS Cases:

When screening test and ELISA becomes positive in a suspected patient, it should be immediately referred to AIDS Control Program/ HIV treatment Centre for further confirmation and treatment.

The most important aspect of patient care is education, which should include empowering patients with basic knowledge about HIV infection, methods of transmission, progression, prognosis, and prevention. A multidisciplinary approach that uses the special skills of nurses, pharmacists, nutritionists, social workers, and case managers is desirable.

In case of a confirmed case with HIV infection or AIDS, provide high quality care and support to all people living with HIV (PLHIV) that includes counselling, psychosocial support, treatment for opportunistic infections (e.g. TB), palliative care and access to antiretroviral therapy.

There is a high risk of disseminated BCG disease developing in HIV-infected infants, thus BCG vaccine should not be given to infants who are known to be HIV positive.

Prevention & Control measures:

- Avoid unnecessary injections altogether. Promote Injection safety which encompasses safe medical injection, safe phlebotomy practices, safe disposal of sharps & health care waste, and the provision of post-exposure prophylaxis (PEP) following occupational exposure to HIV.
- Behavior change communication among patients and health care workers to reduce unnecessary injections and achieve injection safety
- Reduce sexual transmission of HIV by the uptake of appropriate HIV preventive measures including safe sex practices and promotion of the use of condoms.
- Modify the risk behavior of people in the community through "behavior change communication" (BCC).
- STI control especially for sex workers, using the syndromic STI management approach with partner notification and promotion of safer sex.
- Preventing the transmission of HIV from infected pregnant women to infants by the use of antiretroviral therapy (ART) i.e. Tenofovir, Emtricitabine and Raltegravir throughout pregnancy. Women who have not received ART during pregnancy should be given intravenous Zidovudine during labor and the neonate should be given oral Zidovudine for a duration of 6 weeks. Unnecessary obstetrical invasive procedures such as artificial rupture of membranes or episiotomy should be avoided.
- Occupational exposure: If a person has had occupational exposure to HIV, the following regimen is preferred; Emtricitabine plus Tenofovir along with Raltegravir or Dolutegravir for a duration of 4 weeks depending on the type of exposure.

Blood Safety:

- HIV screening of all blood products using recommended techniques
- Recruitment of safe blood donor pool.
- Avoid un-necessary blood transfusion.

Disease Surveillance and Notification:

HIV is a disease, which obligates hospitals, physicians, practitioners, and entities such as laboratories to report by name each newly diagnosed case with contact details to identify the source of infection, to identify others who may need treatment, and to possibly isolate individuals who pose a danger of infecting others.

Risk Communications and Health Education:

Risk communication in context of HIV include information about what causes it, how severe are the consequences, and what can be done to treat or prevent it.

There are two kinds of risk: the risk of transmitting HIV (for people who are living with HIV) and the risk of contracting HIV and both require somewhat different approaches. Keeping in view the HIV/AIDS infected persons and negative perceptions regarding the infection, a communication strategy on creating mass awareness has become imperative for preventing this epidemic from progression.

Behavioral change communication (BCC) and Health communication interventions for at risk population groups are more likely to succeed when they use multiple coordinated communication elements to reach people with consistent high-quality messages through a variety of channels. Communication can be used to create health-seeking behavior in high risk population and framing of a risk communication message is important for achieving behavior change.

Specific Actions requested by the NIH:

1. It may please be ensured that a person is considered HIV positive only after testing positive on multiple tests performed serially in accordance with the national guidelines.
2. Wherever reported, the situation may be continuously monitored and updates along with the actions taken be kindly communicated to the NIH regularly on phone No. +92-51-9255237, Fax: +92-51-9255575, E-mail: eic.nih@gmail.com.
3. The above 'Advisory' may please be circulated widely to all concerned.