

TRAINING MODULE
FOR
SENIOR TREATMENT SUPERVISOR
&
SENIOR TB LABORATORY
SUPERVISOR
ON TB/HIV COORDINATION



Central TB Division & National AIDS Control Organization

New Delhi

August 2005

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Preface

TB is one of the leading infectious causes of death, accounting for over 2 million deaths per year worldwide. Globally, 8.8 million new cases of TB occur every year, of which 1.8 million occur in India. TB control in INDIA is a daunting task for which India is making concerted efforts which are very well appreciated internationally. Globally, the RNTCP is the largest DOTS Programme in terms of patients treated. The programme is demonstrating to the world how effectively the principle of DOTS can be implemented while maintaining the quality.

It is estimated that 40% of the Indian population is infected with *Mycobacterium tuberculosis*. Considering that above 5.1 million people are infected with HIV in India, an estimated 2 million persons are co-infected with *Mycobacterium tuberculosis* & HIV.

HIV infected individuals co-infected with TB have an annual risk of 5-15% of developing active TB as compared with 10% lifetime risk in HIV negative. Active TB disease is the commonest opportunistic infection amongst HIV-infected individuals and is also the leading cause of death in PLWHA (People living with HIV/AIDS).

HIV/AIDS poses a major threat to TB Control in India, with a potential to increase the incidence of TB in some parts of the country. The need of the hour is to establish a package of services for TB-HIV that reach out to PLWHA and addresses their needs for TB diagnostic and treatment services.

Though an action plan has been jointly laid down by both the programmes in 2001, effective and optimum implementation of the plan still remains a challenge.

Training of staff is very crucial to the scaling-up of TB/HIV activities. To streamline the training, both the programmes have come up with Modules which address the training needs of various categories of staff. It is envisaged, that uniform, standardised modular training shall be imparted to all the Programme and general health staff through out the country.

I hope this module would act as a useful tool for further expanding the implementation of TB/HIV Coordination activities in the country.

Dr.L.S.Chauhan
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Preface

TB and HIV tend to fuel each other. HIV infection makes an individual more prone to TB. HIV epidemic has the potential to worsen the TB scenario because HIV increases the risk of disease re-activation in people with latent TB infection. The scenario becomes grimmer since these people can further spread TB to other persons.

HIV is the most powerful risk factor for the progression of TB infection to TB disease. This is further substantiated by the fact that an HIV positive person has 50-60% lifetime risk of developing TB disease as compared to an HIV negative person who has a risk of just 10% of developing the TB disease in a lifetime.

In a developing country like India, the potential extra burden of new TB cases attributable to HIV could overwhelm the budgets and support services. Though, a low cost cure exists for TB and is provided through the internationally accepted DOTS strategy, there is no cure for HIV. With ART however, the scourge of HIV can be converted into a chronic manageable illness. ART, by virtue of improving the immunity of PLWHA's, reduces the incidence of opportunistic infections thereby improving the quality of life and reducing the cost on treatment of OI's.

Effective treatment of TB disease can improve the quality of life and prevent transmission of both, TB and HIV in the community. The basic purpose of HIV-TB coordination is to ensure optimal synergy between the two programmes for the prevention and control of both diseases. Key areas include:

1. Commitment to HIV-TB coordination, through sensitisation;
2. Service delivery coordination and cross-referral, through training, provision of additional services, and coordination at the local level;
3. Optimal and comprehensive use of the community reach of both programmes through the sensitisation and involvement of NGOs and private practitioners who are involved in both programmes;
4. Infection control to prevent spread of TB in facilities caring for HIV-infected persons, and to prevent spread of HIV through safe injection practices in the RNTCP;
5. Joint efforts at IEC particularly with regard to de-stigmatisation, TB being treatable; HIV being preventable; DOTS prolongs life of HIV infected persons and ensuring confidentiality of HIV- and TB-related information.
6. Monitoring and evaluation at district, State and National level to assess the co-ordination between both these programmes.

In view of the consideration discussed above, a strategy for TB-HIV Care was considered and a Joint Action Plan for TB-HIV developed in 2001 by the Revised National Tuberculosis Control Programme and the National AIDS Control Programme.

Phase I of the programme which was launched in 2001, the co-ordination was initiated to cover the population residing in the six high HIV prevalence states, namely- Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra, Nagaland & Manipur. Whereas, in 2003, the Phase II of the co-ordination saw similar activities being extended to eight additional states of moderate HIV prevalence. These states are- Delhi, Gujarat, Himachal Pradesh, Kerala, Orissa, Punjab, Rajasthan and West Bengal.

In order to deliver services properly it becomes imperative that we train the service providers about all the nuances of both the diseases and their managements. Though Training material had been developed earlier, individually by both the National Programmes, yet due to the progressively turbulent dynamics in the arena of HIV-AIDS, reflecting proportionally on the quantum of TB-HIV co-ordination activities, there was a dire need for the technical update/revision of the existing training modules.

To streamline the process of trainings and in order to make it a uniform standard and task specific procedure for the various categories of staff working in both the National programmes, throughout the country, it was proposed to develop common training modules at the Central level, jointly by both the National Programmes.

This training module is one amongst a series of such developed specifically for the purpose of making the health service provider aware of the delicate inter-relation between both the diseases and the devastating impact of their individual or combined effects, which if not treated properly and timely can be lethal.

The module covers all the relevant aspects of both the diseases comprehensively, and will be a valuable guide for the health service provider towards discharging their duties optimally.

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Acknowledgements

This document has been prepared for the training of field staff by a writing group comprising of Dr.V.S.Salhotra, Dr.S.Sahu, Dr.B.B.Rewari, Dr.N.Bhatia, Dr.N.Raizada, Dr.Khomdon Lisam and Dr. S.Phillips under the valuable guidance of Dr.N.S.Dharamshaktu, Additional Project Director, National AIDS Control Organization and Dr.L.S.Chauhan, Deputy Director General, Central TB Division. Valuable contributions in the document have been provided by Dr.F.Wares, Dr.U.Baveja and the team of WHO RNTCP TB/HIV Consultants.

Objectives and methodology of training

LEARNING OBJECTIVES

At the end of the training the STS/STLS should:

- Know where to refer persons seeking HIV testing.
- Understand the importance of maintaining confidentiality of HIV status.
- Understand the effectiveness of DOTS in TB/HIV patient
- Understand how to operationalise the referral linkage between VCTC and RNTCP
- Understand the importance of giving feedback to the counsellor
- Know how to prepare the line-list

METHODOLOGY

- Modular Training
- Individual work exercises
- Field Visit to VCTC

MATERIALS REQUIRED

- Course material
- Blackboard/chalk or White writing board with marker pens
- Line-list and Monthly report

DURATION

- One day (8 hours)

1. Natural history of HIV/AIDS

Introduction

Acquired Immune Deficiency Syndrome (AIDS) is the name of a life threatening condition caused by the Human Immuno-deficiency Virus (HIV). Till today, there is no vaccine to protect the community from this dreadful virus. Once the individual is infected, the virus breaks down the immune system and makes him/her vulnerable to multiple opportunistic infections. These manifest in the form of a syndrome as various signs and symptoms. This syndrome is called AIDS. People infected with HIV may take 7-10 years to develop AIDS. In developing countries like India, the progression to AIDS may be sooner because of malnutrition and a poorer state of health.

HIV burden

India

- An estimated 5.1 million of people are infected with HIV.
- India has the second highest number of HIV infected people in any single country, next only to South Africa.
- Six states of India have been declared as high prevalence states. These states have a HIV prevalence of more than 1% in pregnant/antenatal women. These six states are Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu. Within these State the HIV prevalence is not uniform, there are some districts with High HIV prevalence and some with low prevalence.
- Another three states namely Gujarat, Goa and Pondicherry have reported HIV sero prevalence among the pregnant women is still below 1 %. These three states are taken as highly vulnerable.
- The remaining states including big states like Delhi, UP, M.P., Bihar, West Bengal, Punjab, Haryana, Gujarat, Rajasthan, Kerala etc. have reported HIV sero prevalence rate of below 5% among the high risk groups and below 1% among the pregnant women. These remaining states are taken as vulnerable.
- More than 100,000 AIDS cases have been reported so far.
- It is estimated that approx. 5% of TB patients in India have HIV infection.

Human Immuno-Deficiency Virus (HIV)

Once HIV enters the body it selectively infects white blood cells. White blood cells are an essential part of our immune system. The specific white blood cell that is attacked by HIV is called the "CD4 cell". As the virus destroys the CD4 cells, the person becomes susceptible to various opportunistic infections. The virus may remain dormant for

months/years. In the environment, HIV is easily destroyed by boiling, autoclaving, and various chemicals like-hypochlorite, glutaraldehyde and formaldehyde.

Natural history of HIV infection

A person infected with HIV does not immediately develop AIDS. It can take seven to ten years for the person to progress from HIV infection to AIDS. AIDS is the stage when the patient develops multiple signs and symptoms. HIV infection means that the person is having the virus in the body and but is not suffering from Acquired Immune deficiency syndrome. AIDS is the final stage of HIV infection.

Window period

Most people infected with HIV do not know that they have become infected. Serological tests first become positive about 4–12 weeks after infection, with over 95% of patients “sero-converting” within 6 months of HIV transmission. This period before the serological tests become positive, is called the “window period”. During this window period, the blood test will not be able to detect the presence of HIV infection. However, the person is highly infectious during the window period and can pass the infection to others.

Asymptomatic HIV infection

In adults, there is a long, variable latent period from HIV infection to the onset of HIV-related disease and AIDS. A person infected with HIV may be asymptomatic for up to 10 years or more. The HIV test performed during this period will be able to detect the presence of HIV infection.

AIDS

AIDS as mentioned earlier is the stage when the HIV infected persons develops various signs and symptoms of opportunistic infections. Almost all HIV-infected people will ultimately develop HIV-related disease and AIDS. Some HIV-infected individuals progress more quickly than others to HIV-related disease and AIDS. The common symptoms that can occur are:

- Weight loss of more than 10% of the body weight
- Fever for more than one month
- Chronic diarrhoea for more than one month
- Persistent cough for more than one month
- White patches in the mouth-oral candidiasis etc.

These symptoms are seen in many other diseases. Therefore, one should never conclude that a person with these symptoms is a case of AIDS. It is only by doing a blood test for HIV, that one can confirm the presence of HIV infection.

National AIDS Control Programme

To deal with the HIV/AIDS epidemic in India, The National AIDS Control Programme (NACP) was launched in India in India in 1992. The second phase of the NACP commenced in November, 1999 and has been extended to March, 2006.

The Second phase of the NACP has two key project objectives:

- To reduce the growth of HIV infection in India; and
- To strengthen India's capacity to respond to HIV/AIDS

NACP has the following main services/ activities:

- Voluntary Counselling and Testing Centre (VCTC): VCTC provides an opportunity for a person to learn about his/her HIV status in a confidential manner. The individual undergoes counselling enabling the person to make an informed decision about HIV testing. VCTC are located generally at district level hospital, medical colleges, and sub district hospitals.
- Prevention of Parent to Child Transmission (PPTCT): Prevention of HIV transmission from parent to child is done through the PPTCT centres, located in antenatal clinics of medical college hospitals and district hospitals. PPTCT centres provide counselling services, HIV testing and administration of the anti-retroviral drug Nevirapine to the HIV infected mother at the time of delivery and to the newborn within 72 hours of birth.
- Targeted Interventions: Targeted interventions aim to interrupt transmission of HIV among highly vulnerable populations like sex workers and their clients, truckers, migrants, men who have sex with men, street children, injecting drug users, etc.
- Sexually Transmitted Infections (STI) Clinic: On account of the strong co-relation between HIV and STI, the treatment, control and prevention of STI is a key strategy. STI Clinics provide consultations, investigation, treatment and counselling to the clinic attendees in a confidential manner.
- Blood Safety: For ensuring blood safety, all the blood samples are screened for HIV before transfusion. The blood banks are linked to the VCTC, so as to enable the individual to learn about his HIV status.
- Prophylaxis and Treatment of Opportunistic Infections.
- Provision of Anti Retroviral Therapy.
- Post Exposure Prophylaxis (PEP): For the management of needle stick injury, drugs for PEP are provided.
- Care and Support Centres: These centres act as a bridge between hospital and home care. These centres provide psychological support for HIV infected persons and his family; assist the HIV infected persons to avail of existing health care facilities; helping the patients and the families to prepare for coping with life after HIV. They render advice on proper care and nutrition, helping them to be as independent as possible, etc. Providing advice and assistance for legal matters is also one of the areas in which drop-in care centres are active. There are two types of Care and Support Centres:

NATURAL HISTORY OF HIV/AIDS

- Drop-in Centres
- Community Care Centres, which in addition, provide residential/ institutional care
- IEC and Social Mobilising

The outcomes envisaged in the second phase of NACP are to keep the HIV seroprevalence below 5 percent of the adult population in high prevalence states, below 3 percent in the moderate prevalence states, and below one percent in the low prevalence states

Exercise

- 1. Write full form of HIV and AIDS?**

- 2. How does the virus affect the immune system of infected person?**

- 3. What happens because of decreased immunity?**

- 4. What is the difference between an HIV infected person and a person suffering from AIDS?**

- 5. What does the term “window period” mean?**

- 6. How long does it take for an HIV infected person to develop AIDS?**

- 7. How can we know that a person is having HIV infection?**

- 8. What symptoms are seen in AIDS cases?**

NATURAL HISTORY OF HIV/AIDS

2. Routes of transmission of HIV

HIV is found in all body fluids like blood, semen, vaginal secretions, tears, saliva and breast milk, BUT there are only three well defined routes of transmission of HIV virus:

Sexual transmission

Worldwide, sexual intercourse is the most common route of transmission of HIV infection. The virus can be transmitted from an infected person to his /her sexual partner(s). This includes man to woman, woman to man and man to man.

During sexual intercourse (vaginal, anal and oral), damage to the lining of sexual organs facilitates transmission of HIV from the infected partner to the uninfected one by exchange of body fluids. It is easier for the virus to be transmitted if the uninfected partner is already suffering from some sexually transmitted disease/reproductive tract infections, as in this case the lining of the organ is already compromised. The risk increases four to six fold, particularly if the partner has a genital ulcer disease.

Women are at greater risk of being infected by their male partners because transmission from male to female is more efficient than from female to male.

Although the probability of transmission of HIV infection through this route is only 0.1-1% per sexual act, sexual route of transmission is the single largest route for spread of HIV. It contributes to above 80% of the total cases.

Blood-Borne transmission

This refers to transmission through infected blood or blood products and through contaminated needles and syringes.

Recipients of a single unit of HIV-infected blood or plasma have a 90-95% possibility of acquiring the infection. Blood is tested for HIV before transfusion, and all HIV infected blood is immediately destroyed.

The risk of HIV transmission through sharing of needles and syringes by injecting drug users (IDUs), on the other hand is very high. This is because blood is commonly sucked back into the syringe and then reinjected. This practice has resulted in a dramatic increase in HIV infection among IDUs in Manipur and Nagaland in the North-East. The risk of HIV transmission by needle prick injury in health care settings, i.e. from doctor to patient or vice versa, or from patient to patient is very low- approximately 0.3%.

Prenatal transmission

An HIV infected mother can transmit the HIV infection to her child during pregnancy, at the time of delivery or through breast feeding. The risk of HIV transmission from mother to child is believed to be 20-40%.

Routes through which HIV infection will not transmit

Many myths about HIV centre around the manner in which it can be transmitted. Extensive research has shown that there are only three well defined routes of HIV transmission as discussed above. The studies showed that:

HIV does not spread by

- Socializing or casually living with people with HIV/AIDS.
- Caring or looking after people with HIV/AIDS.
- Shaking hands with an HIV positive person.
- Working with people with HIV/AIDS.
- Casual contact such as sitting next to an HIV infected person, coughing or sneezing, or from food, water, clothing, cups, glasses, plates, forks, spoons, and other shared objects.
- Hugging a person with HIV/AIDS.
- Swimming in pools used by people with HIV/AIDS.
- Sharing toilet seats.
- Mosquitoes, bed bugs, lice, fleas and other insect bites do not spread HIV.

Who is at risk of getting HIV infection?

Each and every one is at risk of getting HIV infection. It is not who the individual is but what the individual does that puts him at risk. Some of the people at high risk of getting infection are:

- Persons having multiple sexual partners
- Injectable drug users who share needles
- Persons having unprotected sex with HIV infected person/unknown person
- Persons with STDs
- Baby from an infected mother
- Person transfused infected blood

Exercise

Who of the following has the greatest or least risk of contracting HIV?

Rank from 1-10. (1 means highest risk for getting HIV and 10 means having the lowest risk of getting HIV infection). Please remember that it is not what a person is but what the person does that puts him at a risk of getting HIV infection.

- _____ School student with a classmate who has AIDS
- _____ Doctor
- _____ Sibling of a person with AIDS
- _____ Someone with multiple sex partners
- _____ Senior Treatment Supervisor treating an HIV-TB patient
- _____ Unborn child of an infected mother
- _____ Nurse
- _____ Commercial Sex worker
- _____ Voluntary blood donor
- _____ Intravenous drug user who shares needles or injection equipment
- _____ Person with STD
- _____ Person with sexual partner with HIV

3. Prevention of HIV/AIDS

Prevention is indisputably the most important intervention to control HIV/AIDS as the drug treatment does not lead to cure and no affordable preventive vaccine is likely to be available in the near future. Health education and behaviour modification is the prime focus of action for interrupting transmission.

Prevention of transmission through sexual intercourse

Safer Sex Practices

Safer sex practices can be defined as any sexual practice that reduces the risk of transmission of HIV from one person to another. The best protection is by sexual activities that prevent exposure to potentially infectious material. These practices include:

- Staying in a mutually faithful relationship where both partners are uninfected.
- Using a condom for all types of sexual intercourse (vaginal, anal or oral) to prevent body secretions containing HIV to come in contact with the skin or mucous membranes of the partner.
- Avoiding penetrative sex and replacing it with masturbation, massage and hugging.
- Avoiding sex when either partner has open sores or sexually transmitted diseases.

Correct and consistent use of Condoms protects from HIV transmission

- Condoms are the most effective means of protection against the organisms that cause sexually transmitted disease, including HIV.
- Condoms are effective only if they are used properly during every sexual intercourse. Instructions on how to use condoms should be clearly given to the users.

Six Steps of Condom Use:

1. Check the expiration date of the condom.
2. As soon as the penis is hard, open the package and squeeze the tip of the condom to remove the excess air inside. Look for damage and use another condom if damage is detected or the condom is dry.
3. Put the open end of the condom on the head of the penis.
4. Roll the condom down the shaft of the penis until it fits comfortably. The condom should extend almost to the base of penis and have a smooth fit. Leave space at the tip of the condom for semen.

5. After ejaculation, the man should hold the condom secure while withdrawing his penis from the vagina to help prevent the condom from coming off or spilling. Never use the same condom twice.
6. Once out of the vagina, the condom can be removed, tie a knot at the open end of the condom to avoid spillage of the semen and disposed off. The penis should be washed to prevent any semen from inadvertently making its way back into the vagina.

Prevention of transmission through blood transfusion

Blood collected for transfusion purpose is tested for HIV. If any of the blood samples is found to be HIV positive, the entire blood bag is destroyed and only HIV uninfected blood is used for transfusion purpose.

Prevention of transmission through skin-piercing procedures

- Use of disposable needles and syringes.
- Safe disposal of sharps.
- Use properly sterilized instruments (Medical, surgical, tattooing, etc).
- Do not share shaving razors.
- If there is an accidental needle stick injury, take Post-Exposure Prophylaxis.

Prevention of parent to child transmission (PPTCT)

Prevention of Parent to child transmission of HIV from mother to child during the pregnancy and while giving birth to the child is possible in the following ways:

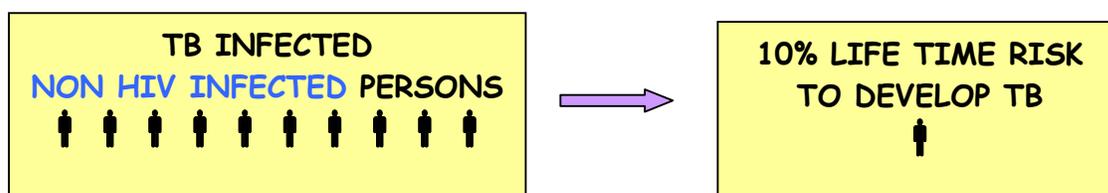
- Counselling the antenatal mother regarding the risk of HIV transmission to the baby and the options available to her.
- If the woman is HIV infected and wants to have a baby, then giving a drug called Nevirapine to the mother and the baby will be greatly beneficial. This facility is being provided at PPTCT centres free of cost. By June, 2005, there were a total of 307 centres providing this facility across the country.

PREVENTION OF HIV/AIDS

4. Introduction to TB/HIV

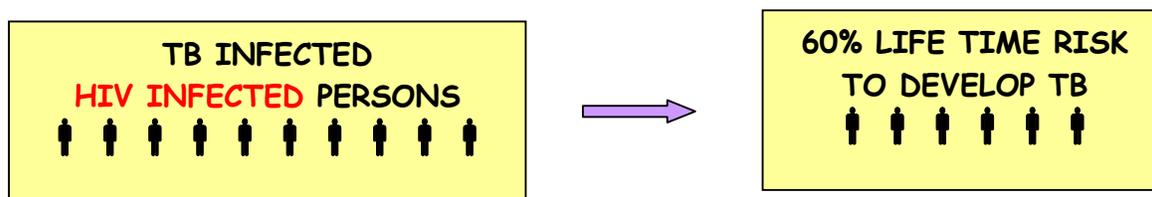
Tuberculosis (TB) is one of the earliest opportunistic diseases to develop amongst the HIV infected persons. The risk of developing Tuberculosis is higher amongst HIV infected persons as compared to HIV non-infected person. The higher risk to develop TB in HIV positives is because of a decrease in immunity. Amongst the AIDS cases reported so far in India, more than half had developed TB. It is estimated by WHO that about 5% of the adult TB cases are HIV positive. In India, an estimated 5.1 million people are infected by the HIV virus and of them over 2 million people are dually infected with both TB and HIV.

Almost 40% of the Indian population is infected with the TB bacilli, i.e., they have the TB bacilli present in their body. Only few of these persons actually develop TB disease. Following infection with the TB bacilli, the life-time risk of developing TB is 10% in non-HIV infected persons. This means that a large number of persons do not develop the disease inspite of having TB bacilli in their body.



Impact of HIV on TB

If the person harbouring the TB bacilli is also HIV infected, then there is higher risk of developing TB disease. The life-time risk of developing TB disease in a HIV infected person is 60%. This means that at least 60% of those who are HIV and TB infected will develop TB disease. The risk of recurrent TB is slightly higher in HIV infected persons. Thus with an increase in number of TB cases in People Living with HIV/AIDS (PLWHA), there maybe increase in the risk of transmission of TB to the general community.



An HIV infected person who is newly infected with TB bacilli, is also more likely to progress to developing TB disease as compared to an HIV negative person.

The rate of progression from infection to disease is higher; ten to thirty times higher among individuals infected by both TB and HIV as compared to those infected with only TB.

EFFECT OF HIV INFECTION ON TB DISEASE

Risk of developing TB is higher in HIV infected persons. The life-time risk of developing TB is 60% in persons infected with both HIV and TB.

Impact of TB on HIV

In a TB/HIV co-infected person, the immune response to TB bacilli increases HIV replication. As a result of the increase in number of viruses in the body, there is rapid progression of HIV infection and the patient starts developing symptoms of various opportunistic infections. Thus the health of the patient who has dual infection deteriorates much more rapidly than with a single infection. Amongst the AIDS cases, TB is the most common opportunistic disease. The mortality due to TB in AIDS cases is also high.

EFFECT OF TB DISEASE ON HIV INFECTION

**Shortens the life span of patients with HIV infection.
TB is a common cause of death in AIDS patients.**

Impact of HIV on TB control

The principles of TB control are the same even when there are many TB/HIV patients. Treatment with DOTS (Directly Observed Treatment, Short course) is even more important in HIV positive persons than HIV negative persons, TB being the leading cause of death among PLWHA. Treatment with DOTS improves the quality of life and increases the life span of an HIV infected TB patient. The following consequences are likely to be seen wherever there is high prevalence of HIV and TB.

- Increased load of TB cases, including smear positive cases
- Increased morbidity and mortality in TB patients due to HIV related opportunistic infections
- Higher default rates because of adverse drug reactions
- Increased risk of TB transmission
- Increased burden on TB services

- Delay of access to health services by TB suspects due to the stigma of HIV-AIDS
- Increased rates of TB recurrence.

Impact of TB on HIV programme

- Increased load of TB disease among People Living with HIV/AIDS (PLWHA)
- TB accelerates the progression of HIV related immunosuppression
- Increased morbidity and mortality from TB disease among PLWHA
- Difficulties in diagnosing TB among PLWHA due to atypical presentation of TB disease
- Increased burden on HIV services

5. Diagnostic and treatment issues of TB/HIV patient

Diagnosis of TB in HIV infected patient

Pulmonary Tuberculosis

Pulmonary tuberculosis is the most common manifestation of tuberculosis in adults infected with HIV. Tuberculosis can occur at any point in the course of progression of HIV infection. The clinical pattern of tuberculosis correlates with the patient's immune status. If TB occurs in the early stages of HIV infection when immunity is only partially Immuno-compromised, the features are more typical of tuberculosis. As immune deficiency advances, HIV-infected patients present with atypical pulmonary disease and/or extra pulmonary TB. It is important to note that HIV-infected patients with pulmonary TB may have a normal chest X-ray.

The following table shows how the clinical picture, sputum smear result and chest X-ray appearance often differ in early and late HIV infection:

Features of PTB	Stage of HIV Infection	
	Early	Late
Clinical Picture	Often resembles post-primary TB	Often resembles primary TB
Sputum Smear Result	Often positive	Often negative
Chest X-Ray Appearance	Often cavities	Often infiltrates. No cavities

Extra-pulmonary Tuberculosis

Persons infected with HIV are more likely to have Extra-pulmonary TB in the later stages of the disease as they become more immunocompromised. The main types of Extra-pulmonary TB seen in HIV-infected patients are lymphadenopathy, pleural effusion, pericardial effusion, and miliary TB.

Treatment of TB in HIV infected patients

In general, anti-TB treatment is the same for HIV-infected persons as for HIV-negative TB patients, with the exception of the use of Thioacetazone which is associated with a high risk of severe and sometimes fatal skin reactions in HIV-infected individuals.

However, Thioacetazone is NOT used in RNTCP. The diagnostic and treatment algorithm of RNTCP applies, even for HIV infected patients. DOTS is effective in HIV infected persons.

Response of HIV positive TB patients to anti TB treatment

Response in patients who complete treatment

Patients who complete treatment show the same clinical, radiographic and microbiological response to short-course treatment whether they are HIV positive or negative.

Mortality

The mortality in TB/HIV patients during and after treatment is slightly higher and is partly due to TB itself and partly due to other HIV-related problems like septicaemia, diarrhoea, pneumonia, anaemia, Kaposi's sarcoma, cryptococcal meningitis.

Mortality is less in TB/HIV patients treated with Short Course Chemotherapy than with the old standard regimen.

Side Effects of anti-TB drugs in TB/HIV patients

Adverse drug reactions are more common in HIV-positive than in HIV-negative TB patients. Risk of drug reaction increases with increased immuno-compromise. Most reactions occur in the first 2 months of treatment. Gastrointestinal disturbances like nausea and vomiting, and hepatitis are more common.

What are the benefits of DOTS to an HIV infected TB patient?

- Prolong and improve quality of life.
- The average life span is increased.
- Stop the spread of TB.
- Prevents emergence of Multi Drug Resistant –TB.
- Relapse rates are low
- The survival rate for HIV positive TB patients receiving DOTS is higher than in those receiving those receiving Non-DOTS.
- There is a three-fold decrease in the death rate.

Failure to use DOTS in the face of HIV can lead to explosive spread of TB with cases and drug resistance increasing rapidly.

Anti tuberculosis and antiretroviral treatment

- Till date, no cure is available for HIV/AIDS. It is only the opportunistic infections in HIV/AIDS, which can be treated and cured. The antiretroviral (ARV) drugs, which

are used in HIV positive patients, are however effective in slowing down the action of the virus and prolonging life.

- It is recommended that people with TB/HIV complete their TB therapy prior to beginning ARV treatment unless there is a high risk of HIV disease progression and death during the period of TB treatment.

Exercise

1. How does pulmonary TB differ in HIV infected person from HIV negative person?

2. What are the benefits of DOTS to an HIV infected TB patient?

6. Psychosocial aspects of TB/HIV

Psychological Aspects of HIV

People with diagnosed HIV infection and HIV related illness including AIDS, and those close to them, are confronted by many different problems. All of them require emotional support. Anxiety about having spread infection, physical isolation, hospitalization, discrimination within the community or family, loss of housing, interruption of education, financial problems, the physical effects of illness, disease progression, loss of relationships, bereavement, anger, loneliness and depression, are some of the concerns that need to be addressed

On being diagnosed HIV positive, the responses of people vary. Most people are frightened of HIV-AIDS. Some are shocked. Some feel angry. The feelings of HIV-AIDS patient vary and change often. One day they may feel rejected and lonely. The next day they may feel hopeful. This is normal. Mentioned below are some of the feelings of HIV positives.

Shock: No matter how much you counsel the client it is a shock for them to learn that they have HIV/AIDS. They may feel confused and not know what to do.

Denial: At first, some people cannot believe that they have HIV/AIDS. They react saying: "The doctor must be wrong", "It can't be true. There must be some mistake". Many of them will get the blood tested at different centres in the hope of getting HIV negative report.

Anger: Some people get very angry when they find out they have HIV or AIDS. They blame themselves or the person they think gave them the HIV infection. Some may even blame God.

Revengeful: Some people want to take revenge when they find out that they have HIV/AIDS. They want to infect other people.

Bargaining: Some people try to bargain. They think, "God will cure me if I stop having sex". "I will do a pooja, God will cure me"

Loneliness: People with HIV often feel lonely.

Fear: People with HIV fear losing their jobs, other people knowing their HIV status, discrimination, death etc.

Self-consciousness: Some people with HIV-AIDS think everyone is looking at them or talking about them. This makes them want to hide. Sometimes they feel rejected by others or they reject themselves. They are often feeling guilty.

Depression: They feel useless. They feel there is no good reason to live. They isolate themselves from others, stay at home, stop eating, and do not talk to others.

Acceptance: After sometime most people with HIV-AIDS, accept their situation. This is helpful. They often feel more serene. They are able to plan the best way to lead their life or plan for future.

Hope: Being hopeful lifts ones spirits and gives them strength to face each situation. Hope can help a person to fight HIV and AIDS and live longer. Hope to live long time, of cure being found, of treatment being made available etc.

Social Aspects of HIV

HIV/AIDS has immense stigma attached to it. There is great fear of contracting HIV and therefore people wish to isolate the HIV positive individuals. There are many instances of the entire families of a HIV positive individual being isolated by their villages, people being thrown out of the jobs, asked to vacate houses etc. HIV positive women have been deserted by their spouse and their family even when she has contracted the infection from her husband. Health care providers have hurriedly discharged patients on one pretext or the other as soon as they found out the HIV status. Widespread HIV testing of patients is being done prior to surgery, for the protection of the health care provider, which is unnecessary.

As the most common mode of spread is Sexual Intercourse with an infected person, all HIV positives are looked at suspiciously. Each and every HIV infected person is thought to have multiple sex partners and considered to be immoral. It is especially more distressing for a woman who has contracted the infection from the faithful relationship with her husband.

HIV positive children are not given admission in school, isolated in the class. Children of HIV infected parents are not cared for by other family members after the death of parents.

HIV positives are being exploited by many dubious people proclaiming to have cure for HIV. People have incurred huge debts to buy antiretroviral drugs and other drugs supposedly effective in curing HIV. For this purpose it is important to maintain confidentiality of the HIV status. This explains the RNTCP policy of not writing HIV status of the patient on any record or register.

Psychosocial Aspects of TB

Like HIV, TB is also a disease with stigma, but to a lesser extent than HIV. Widely held and usually mistaken beliefs about what causes TB, how it is transmitted, whether it can be cured, are linked to stigmatization and discrimination against people with Tuberculosis. TB can occur to any person, but it is conditions of poverty, malnutrition and overcrowding which predispose an individual to develop TB. TB causes enormous social and economic burden on patients, their families and the community. If the sole bread earner of the family is suffering from TB, it leads to loss of daily wages and puts the family into debt. Patients may seek treatment in health facilities or with health providers whom they trust and these may be outside the government health system. While on treatment patients tend to discontinue their treatment as their health improves. The motivation to take regular medication for a long period may not be there even when medicines are provided free of cost. Women TB patients face special difficulties due to stigma and socio-cultural barriers for accessing care. An understanding that TB is curable, not hereditary, and after a short period of treatment, is no longer infectious can reduce the stigma attached to TB, led to an increased acceptance of people with TB

and create a supportive environment to encourage diagnosis, treatment and effective cure.

Educating an TB/HIV patient on his/her illness

You may have patients who are not only having TB disease but who also are HIV infected. These are the TB patients who would voluntarily disclose their HIV status to the service provider in RNTCP. Such patients require counselling on HIV and TB. Mentioned below are the issues to be discussed with TB/HIV patient apart from those mentioned above. As and when required the patient can be referred to the appropriate centres.

1. TB is curable amongst HIV positive people.
2. Treatment with DOTS improves the quality of life of an HIV infected person and prolongs life by an average two years.
3. Further transmission of TB to other family members and community is prevented by treatment with DOTS

7. Voluntary counselling and testing

Introduction

HIV voluntary counselling and testing has been shown to have a role in both HIV prevention and as an entry point to care. It provides people with an opportunity to learn and accept their HIV status in a confidential environment. VCT has become an integral part of HIV prevention programs in many countries, as it is relatively cost effective intervention in preventing HIV transmission.

Definition

Voluntary HIV counselling and testing is the process by which an individual undergoes counselling enabling him or her to make an informed choice about being tested for HIV. It is the individual's choice based on the appropriate information and support provided by the Counsellor. The Counsellor keeps all the information confidential. In concurrence with the Supreme Court decision, Partner notification is necessary and this makes it imperative for the attending physician to disclose the HIV status to the spouse or sexual partner of the person. In spite of this all efforts must be made to counsel the person for voluntary disclosure of HIV status to the spouse or sexual partner.

Who can avail VCT services

VCT is for any one who may be at risk of HIV infection and anyone who wants to know their HIV status. VCT is not just for pregnant women, people who are sick or for those who have multiple sexual partners.

- Any person desiring to be tested for HIV-AIDS, with
 - History of risk behaviour
 - Spouse or partner is HIV infected
 - Children of HIV infected parents
 - History of STD
 - Accidental Needle stick injury
- Referrals from
 - Out-Patient Department
 - Ward Patients
 - NGO's
 - Private Physicians etc
- Known HIV infected persons

Counselling process

The process consists of the following-

- Pre test Counselling
- Post test counselling
- Follow-up counselling

Pre-Test Counselling

Individual HIV counselling should be offered before taking an HIV test. In this process, the counsellor prepares the client for the test by explaining what an HIV test is; and also by correcting myths and misinformation about HIV/AIDS. Persons refusing pre-test counselling should not be prevented from taking a voluntary HIV test. However, an informed consent from the person being tested is the minimum requirement before an HIV test. The decision to take the test or not is always patients own.

Post-Test Counselling

Post test counselling should always be offered. The idea is to help clients to understand their test results and initiate adaptation to their seropositive or seronegative status. When the test is seropositive, the counsellor tells the client the result clearly and sensitively, providing emotional support and discussing how he/she will cope. The counsellor must ensure that the person has immediate emotional support from a partner, relative or friend. Sharing one's HIV status with a sexual partner is important to enable the use of safer sexual practices and should be encouraged.

Counselling is also important when the test result is negative. While the client is likely to feel relieved, the counsellor needs to discuss changes in behaviour that can help the client to stay negative. Depending on the history of risk behaviour, sometimes the client may need to be asked to undertake the test again in 3-6 months time, considering the window period could be variable. The person having high risk behaviour on being given a negative test result needs to be explained in clear terms not to carry the impression of being immune from the infection and that s/he might get infected if risk behaviour is not changed.

Follow up Counselling

Most of the persons may require follow-up counselling immediately after post test counselling or anytime later. This often coincides with a crisis or change in personal circumstances. As part of follow-up counselling, the VCTC services should offer the opportunity of ongoing care and support for seropositive cases and should act as an entry point to medical care. Collaboration and cross referral can ensure that people with HIV receive appropriate medical care including treatment for TB.

HIV testing

The diagnosis of HIV testing has traditionally been made by detecting antibodies against HIV. Besides ELISA, newer rapid and simple tests are available which are comparable to ELISA on sensitivity and specificity.

The rapid tests, which are available in VCTC, are Capillus, Coomb aids, Tridot, Immunocomb etc. The advantages of using rapid test are the availability of test results in a short duration of time and are easy to perform.

In voluntary counselling and testing centres the following procedures is practiced for HIV testing -

- The serum sample is first tested with one ELISA or Simple/Rapid assay
- Any reactive sample is retested using a different assay
- Serum found reactive on the second assay is repeated for the third test.
- Serum found reactive on all the three tests is considered HIV antibody positive.

Confidentiality

Confidentiality is the state of being 'private or secret'. Maintaining the client's privacy by restricting access to personal information and keeping client's information confidential, especially HIV test results, respects clients basic rights, protects them from stigma and discrimination and builds trust between the client and the counsellor.

At the VCTC, the client's information is kept confidential and this information is not furnished under any circumstances to any other person without the individual's explicit consent. The client should be encouraged to disclose this information to the spouse.

All RNTCP service providers including STS should note that the HIV status should NOT be mentioned in the TB treatment card or any other TB record or register. Use of symbols or alphabetical/numerical codes should NOT be done.

Benefits of VCTC-

The potential benefits of VCTC are –

- Early access to care and treatment
- Prevention of HIV related illness
- Emotional Support , Better ability to cope with HIV related anxiety
- Motivation to initiate or maintain safer sexual practices
- Motivation for drug related behaviour
- Safer blood donation
- Improved Health status through good nutritional advice

Voluntary Counselling and Testing Centre (VCTC) Programme Implementation

There is at least one VCTC in each district. These VCTCs are generally located either in the Civil hospitals, Medical College hospitals or any other major hospitals. Each VCTC is staffed by one male counsellor, one female counsellor, one Laboratory Technician. The activities of VCTC are under the supervision of Medical Officer designated as In-charge of VCTC.

All the persons who have to be tested for HIV undergo pre-test counselling. A written consent of the Client is taken, in a local language, if the Client is willing for HIV test. The Client is given an identification number called as Person Identification Digit (PID) Number. A PID register is maintained in which the Clients number and name is written. This register is a confidential register. The Clients identity is not revealed to any other person. The VCTC counsellors record the details of the Client in the Counselling register.

The VCTC laboratory technician withdraws the blood and performs the HIV test. Rapid test kits are used and the test is done as per the HIV testing guidelines. Confidentiality of the HIV status is ensured at the Laboratory too. In the Laboratory Register Client is identified by PID (Personal Identification Digit) no. After performing the HIV test results, the Laboratory technician prepares the Report of HIV Test Result and gives it to the Counsellor. The counsellor reveals the test result to the Client after appropriate post-test counselling.

The counsellors should be trained in identifying TB suspects, especially those having cough for more than 3 weeks, and refer them to the RNTCP designated microscopy centre. The patients with symptoms of extra-pulmonary TB will be referred to medical officer for appropriate investigation. Once the TB suspect reports at the RNTCP designated microscopy centre, the person should be treated just as any other person coming for sputum examination, and if found positive should be initiated on DOTS treatment.

VOLUNTARY COUNSELLING AND TESTING

8. Guidelines for operationalisation of VCTC-RNTCP cross-referral linkages

Service linkages between VCTC and RNTCP diagnostic and treatment centres are the most important area of co-ordination between the HIV/AIDS and TB Control programme. RNTCP visualizes VCTC as a PHI referring TB suspects irrespective of their sero-status. VCTC's will identify and refer suspected TB cases to the RNTCP Designated Microscopy Centres. Whereas Designated Microscopy Centres/ OPD/ wards may refer TB patients for counselling and diagnosis of HIV infection, they could also refer known HIV positive TB patients to the VCTC for Counselling.

Steps for operationalisation

- Ensure that the VCTC, DMC and DOT centre are in the same campus. In case they are not in the same campus, establish referral linkages between them
- Ensure that all the VCTC and RNTCP staff, including the LT of the DMCs and VCTC, are trained in TB/HIV
- Provide RNTCP Laboratory Forms of sputum examination for referral of patients from VCTC to RNTCP DMCs
- Provide a DMC and DOT centres directory to all the VCTCs
- Ensure posters on TB are displayed at the VCTC's and provide any other IEC material on TB that is available for distribution to clients
- Confidentiality of HIV status must be ensured at all levels by all staff. Remember that the HIV status of a patient should not be mentioned in the Treatment card, TB lab Register or any other document. Do not use any symbols/codes for identification of HIV positive persons
- The VCTC Counsellors are to visit the DMCs, and the STSs are to visit the VCTCs to follow-up on referred cases.
- Monthly RNTCP Review meetings are to be attended by the VCTC staff.
- State TB Officer, State VCTC Programme Officer, District TB Officer and District Nodal Officers (HIV/AIDS) to review TB/HIV co-ordination activities during their periodic field visits.

There are two types of Referrals: VCTC to RNTCP and RNTCP to VCTC

Referral of persons from VCTC to RNTCP

The Process at VCTC

VCTC Counsellors will identify persons with symptoms suggestive of TB disease amongst the clients. The Counsellor will ask each and every client for history of cough for more

than three weeks and other associated symptoms of TB. These patients depending on their symptoms will be referred for appropriate investigation. Patients, irrespective of their serostatus, having cough will be referred to Designated Microscopy Centre (DMC) for sputum examinations and in case of symptoms of Extra-pulmonary TB, the patient should be referred to the appropriate doctor. The RNTCP sputum examination form will be filled in by the Counsellor. On the sputum examination form, the Counsellor should fill in all the required details including the name of VCTC, and take special care in obtaining and recording correct residential address. The counsellor will not mention the HIV status of patient on the form or elsewhere, but shall encourage the patient to disclose his HIV status (if known) to the treating physician, in the interest of better case management. The sputum examination form is given to the patient with specific instructions on the location and timings of the DMC. The Counsellor should make a detailed note of the referral in the Counselling Register.

The counsellor should impart information / counselling on TB to all VCTC clients and should document the same in the counselling register, irrespective of whether they have signs or symptoms of TB or not. Either a column can be added in the Counselling register to document the information on persons who received information / counselling on TB or record it in the 'Remarks column' of Counselling Register. During counselling, encourage voluntary disclosure of HIV status by the client to the treating physician in those referred.

The Process at Designated Microscopy Centre

Once the patient reaches the Designated Microscopy Centre, the patient will undergo the same process as any other TB suspect, i.e. the diagnostic algorithm of RNTCP will be followed. The Laboratory Technician will enter the details of the patient, including correct residential address, in the TB Laboratory Register and clearly mention the name of VCTC as the referring unit in TB laboratory register. After all the three sputum examinations are done, the results of the test are given to the patient. Patient will go to the Medical Officer, who will decide on further management.

In case of Extra-pulmonary TB, the VCTC will refer the patient to the Medical Officer, who will further refer the patient for necessary investigations. After obtaining the test results, the Medical Officer will decide further course of management.

If the patient is having TB (Pulmonary or Extra-pulmonary TB), treatment categorization is done as per the RNTCP treatment algorithm. Known HIV positive persons, diagnosed with TB disease for the first time (new TB cases) will receive RNTCP Category I regimen whereas retreatment TB cases will receive Category II regimen. Voluntary disclosure of the HIV status by the client should be encouraged. Based on patient's area of residence, these patients are referred for treatment to the nearest DOT centre. A home visit is done to confirm the patient's address. Once the address verification is over and the patient is convinced to take DOTS for the required duration, the treatment is started. Patient's treatment card is made. Once the patient is started on treatment, the Senior Treatment Supervisor (STS) will enter the patient's information in the TB register and give a TB number, which is mentioned in the treatment card. In cases of referral for treatment to another district / TU, special care must be taken to obtain a feedback from the receiving district / TU about the start of treatment. STS and VCTC counsellor will coordinate to check how many of the referred patients did reach DMC and record the outcome of the referral.

Please note that HIV status of the person should NEVER be mentioned in the TB treatment card, TB Register or any other RNTCP document. Neither should any symbol be used to identify HIV infected TB patients. No separate record is to be maintained for recording the information on TB/HIV patients.

Recording information on TB status of persons referred by VCTC

If the patient comes back to VCTC after attending the TB OPD, the information regarding the diagnosis should be recorded in to the Counselling Register. For the remaining patients, at the end of the next month, when the information about the TB suspects referred from VCTC is provided in the Line-List by STS, this information is transferred onto the Counselling Register.

Referral of TB patients to VCTC for HIV-testing

Process at RNTCP Unit

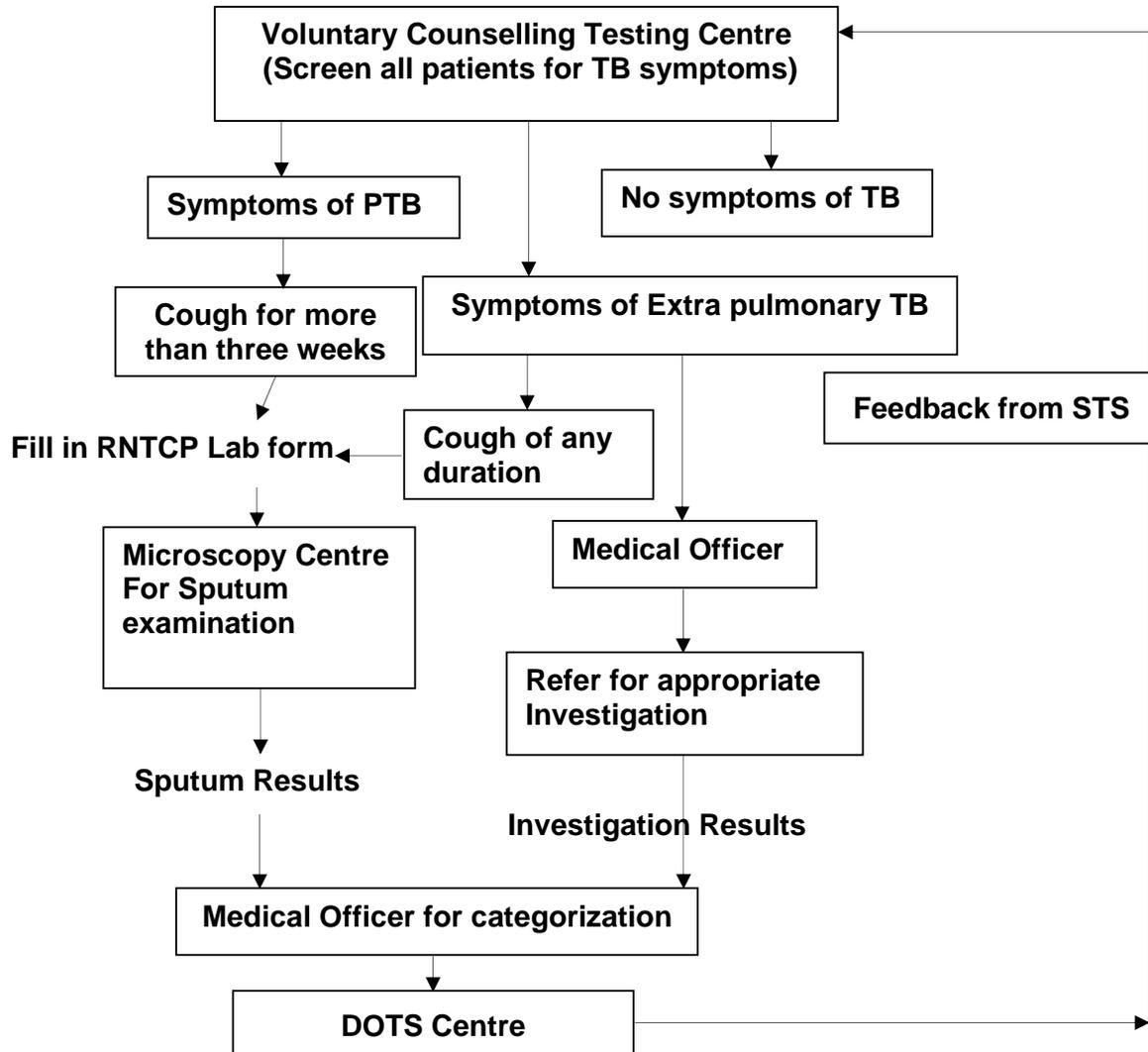
Diagnosed TB patients who have symptoms/signs suggestive of HIV infection will be referred by the medical officer to the VCTC. Thus, these diagnosed TB patients may be referred from DMC, DOT Centre, Out-patient clinics, TB ward, TB Clinic etc. Sometimes the patient may simultaneously be investigated for TB and HIV. The doctor should first complete the investigations for TB and then refer for HIV investigations. While referring to the VCTC, the doctor should write a referral note to VCTC in which the TB status of the person is mentioned. The referral of the TB patients to the VCTC for eliciting the HIV status for the sake of categorisation should never be done.

Process at VCTC

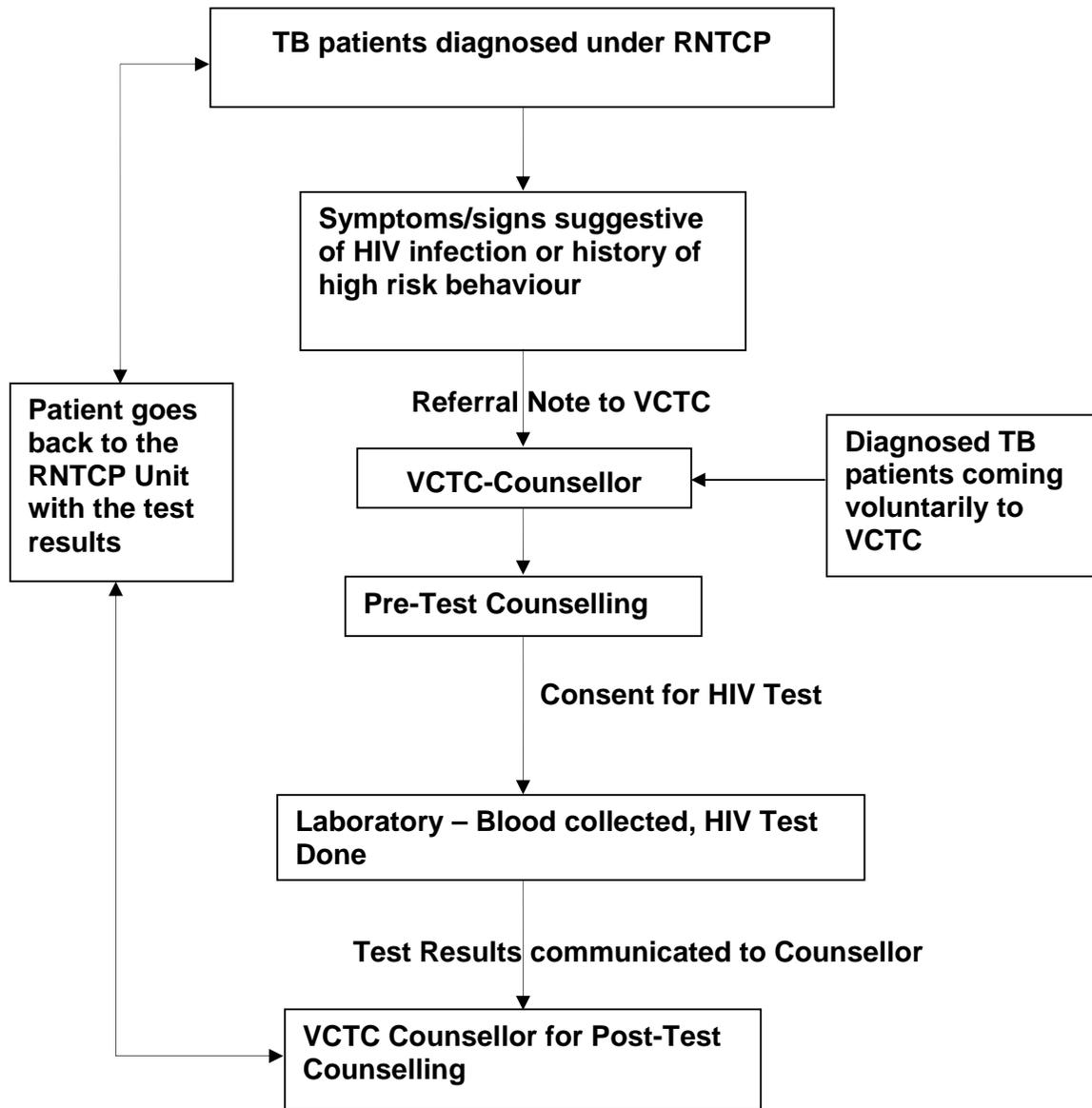
Once the referred TB patient reaches VCTC, the same procedure will be followed as that for any other client attending VCTC. Some TB patients may come on their own for HIV Testing (Direct Walk-In).

At the VCTC, the patient/client will undergo pre-test Counselling. HIV testing is done after obtaining informed consent. The details of the patient/client will be entered into the PID register and Counselling Register. HIV testing is done and the test results are handed over by the Laboratory Technician to the Counsellor. The Counsellor reveals the HIV test result to the patient/client with post-test Counselling. The HIV test results are not revealed to any other person other than the individual himself.

Referrals from VCTCs to RNTCP diagnostic and DOT Centres



Process of referral from RNTCP to VCTC



Monthly Report

VCTC-RNTCP co-ordination is monitored with the help of the monthly report on TB/HIV activities. In order to prepare the monthly report, the first step will be to make the Line-List. Preparing the Line-List will be the joint responsibility of the VCTC and RNTCP. The Line List for patients referred in the month of January, will be completed in the first week of March (fifth of the month) by the Counsellors and STS. Once the Line-List is completed, the monthly report will be prepared by the VCTC. The completed Line List and the Monthly Report will be compiled and submitted by the VCTC to all the concerned Officials (State AIDS Control Society, DTO) by the 10th of the month. The time taken for diagnosis and initiation of TB treatment may take up to 7 days and registering the patient in the TB register may take another few days and a maximum up to 1 month. Therefore, there will be a delay of one month in reporting of TB/HIV cross-referral. It means that the report of January will be submitted in March, that of February in April and so on.

At the SACS, the information on TB/HIV activities will be compiled and centre-wise report along with the monthly report for the entire state will be sent to NACO, State TB Office and Central TB Division by the 20th of every month

Line-List of Persons Referred from VCTC to RNTCP

The Line-List is prepared for each VCTC in the district separately. On the Line-List, the name of the VCTC, the district and the reporting month/year is to be filled in by the VCTC Counsellor. The Line List has two parts. Part A, i.e. columns 1 to 8 contains information on the persons referred by VCTC to RNTCP. Part A is to be completed by the VCTC Counsellors and signed by the VCTC Counsellors and the Incharge of VCTC. Below the signature, date of completion of Part 'A' is to be mentioned. Note that only those persons who have been sent from VCTC to RNTCP are included here.

PART A of LINE-LIST

COLUMN NO.	COLUMN TITLE	WHAT SHOULD BE WRITTEN
1	Sr. No.	This is the serial number that you will write as you are making the line-list
2	PID No.	PID No. (Person Identification Digit No) is the number that the VCTC Counsellor has given to the client.
3	Complete Name and Complete Address	It is important to have the complete name and address of the person, otherwise it is difficult to trace out whether these persons have reached RNTCP Unit, whether they have been investigated and put on treatment. Therefore the VCTC Counsellor should write the complete name of the person.
4	Age	Age of the person should be mentioned
5	Sex	Male, Female or Transgender (Eunuch) should be mentioned
6	New or Follow Up Patient	Those patients who have come for the first time are labelled as 'new patients'. This includes those patients who have come for pre-test and post-test counselling.

		Follow Up Patients are those who have come to the VCTC after post-test counselling. This includes both HIV positive and HIV negative persons who come for follow up counselling.
7	Date of Referral	The date when the client is referred to the RNTCP Unit
8	Name of RNTCP Unit referred to	RNTCP Unit includes DTC, DMC, TB OPD, TB Clinic etc i.e. any health facility where the facility for sputum investigation for TB under RNTCP is available. In case the patient is referred to a doctor/OPD, the name of the OPD should be mentioned. For sputum examination, the counsellor should identify the Microscopy Centre that is convenient for the patient. The Counsellor should record the name of the centre the person has been referred to.

The Counsellor will meet the STS with the line list on the 1st or 2nd of the next month, i.e. the Line List for patients referred in the month of January, will be completed (Columns 1-8) in the first week of February by the Counsellors and handed over to the STS. The Counsellor should remember that HIV status should not be mentioned in the Line-List. The STS/STLS will scan through the TB laboratory register to find out whether these patients have undergone the sputum microscopic examination. If the patient is sputum positive, then the TB number as mentioned in TB laboratory register will tell whether the patient has been started on DOTS and the treatment category. If the patient is sputum negative, then look for the patient in the TB register of the concerned Tuberculosis Unit. If patient was suspected of having Extra-pulmonary TB, referring to the TB register would be helpful. For diagnosed TB patients referred out for DOTS treatment to another TU, the STS of the corresponding TU should be consulted, and for referrals for treatment outside the District the 'referral for treatment' register at the DMC should be scrutinized.

Once the Line-List is completed, the STS will sign the list and write the date of completion of Line-List. The STS will then take the signature of the concerned DTO/CTO or MO-TC. This Line List is handed over to the VCTC Counsellor by the fifth of the month.

Part B of LINE-LIST

COLUMN NO.	COLUMN TITLE	WHAT SHOULD BE WRITTEN
9	Has person reached RNTCP Unit (Yes/No)	To know whether the patient has reached the RNTCP Unit, refer to the TB Laboratory Register of the DMC where the patient has been referred. If the patients name is located in the TB Laboratory register, write 'YES' in the Line-List. If the patient has not reached DMC, write 'NO'. In case of Extra-pulmonary TB, where the patient has been referred to a doctor, asking the concerned doctor would be helpful. This information should be obtained from the concerned doctor immediately after referral and recorded in the Counselling register by the Counsellor. If the patient has reached the OPD and examined by the doctor, write "YES" in

GUIDELINES FOR OPERATIONALISATION OF VCTV-RNTCP CROSS-REFERRAL LINKAGES

		the Line-List. If patient has not reached the centre, mention 'NO'. Counsellor should coordinate and ensure all such patients are referred to RNTCP treatment unit, once diagnosis is established.
10	Has Patient undergone three sputum Examination – (Yes/No)	If patient has undergone complete sputum examinations, then mention 'YES' If patient's only one sputum examination is done, mention 'NO' in the Line-List. Sometimes, after the patients name is entered in the TB Laboratory Register, the patient does not give sputum sample. In such a case mention 'NO' in this column. In case of EP TB, where the patient does not require sputum examination, write 'not applicable'
11	Date of Sputum Examination	The exact date on which the sputum examination was done
12	Sputum Result – Sputum Positive/Sputum Negative (If three sputum examinations are done)	Record the result of sputum examination for all those patients who have undergone complete sputum examinations. The sputum result is mentioned as sputum positive or sputum negative. In case of sputum positive do not mention the grade, only mention sputum positive
13	Date and Investigation Report for Extra-pulmonary TB	In case where the patient has been referred for Extra-pulmonary Investigations like FNAC, X-ray etc, the date of investigation and the results of investigation should be mentioned.
14	Is patient diagnosed as TB – Yes or No	If the patient is diagnosed as TB mention 'YES' and if non-TB mention 'NO'. For getting this information, the STS will need to check the TB Laboratory Register, Treatment Referral Register and the TB Registers
15	If diagnosed as TB, specify whether patient is sputum positive TB, sputum negative TB or Extra-pulmonary TB	If the patient is diagnosed as TB, the STS should mention whether the patient is sputum positive TB, sputum negative TB or Extra-pulmonary TB.
16	Is patient receiving DOTS or Non-DOTS	Once diagnosed, the patient should be started on treatment. From the TB register, find out whether the patient is receiving RNTCP DOTS or non-DOTS. Mention DOTS if patient is being treated under RNTCP regimen and 'Non-DOTS' if under any other regimen NTCP regimen
17	Treatment Category	If patient is receiving treatment, mention the treatment Category. Category I/II/III for DOTS regimen Or the NTCP regimen if non-DOTS
18	Date of Starting Treatment	The date of starting treatment as mentioned in the TB register should be recorded in the Line-List.
19	TB No.	From the TB register, write the TB no.
20	Remarks	The following information can be entered in the remarks column.

		<ul style="list-style-type: none"> • Name of the DOT centre to which patient has been referred to • Name of the district, if the patient is from another district • If patient has died, date when expired • Reason for placing the patient on Non-DOTs regimen • If patient is from the district and has not been started on Treatment, mention the reason. • Any other
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Monthly Report of TB/HIV activities at VCTC

The monthly report (Annex.) contains information on TB/HIV activities of the VCTC; no. of referrals made by VCTC to Microscopy Centre and no. diagnosed as TB amongst them; information about TB patients referred for HIV testing and their HIV status and no. of clients receiving information on TB.

Once the line list is completed, the VCTC Counsellors prepares the monthly TB/HIV report which has only aggregate numbers and no reference to any individual patients.

Section I: TOTAL NUMBER OF CLIENTS ATTENDING VCTC:

INDICATOR	WHAT SHOULD BE WRITTEN
a) No. of clients who received Pre-test Counselling	Refer to the Counselling Register and count the number of clients who have received pre-test counselling for the month. The reporting period is from day one of the month to the last day of the month
b) Out of above (a), No. detected to be HIV Positive	Out of the clients who received pre-test counselling, count the number of clients who are HIV positive. Those clients who are sero-positive by three different test kits/principle are counted as HIV sero-positive.
c) No. of HIV Positive and HIV Negative Follow-up Clients who attended VCTC	Count the number of HIV positive persons (I) who came for Follow Up Counselling in the month Count the number of HIV negative persons (II) who came for Follow UP Counselling in the month Add (I) and (II) to get the total no. of clients who came for follow up counselling

Section II: REFERRAL OF SUSPECTED TUBERCULOSIS CASES FROM VCTC TO RNTCP

INDICATOR	WHAT SHOULD BE WRITTEN
a) No. of persons suspected to have TB referred to RNTCP Unit	From the Line-List count the total number of persons suspected to have TB who were referred to RNTCP Unit. Referring to the Counselling register, count how many of these persons are HIV sero-positive and how many are HIV sero-negative. Mention accordingly under the appropriate columns in the monthly report. In case the person has not undergone HIV test, but still has been referred to RNTCP he will not be included in this indicator even though his name is there in the line-list. Similarly in case of indeterminate HIV test results, the person will not be counted.
b) Out of above (a) referred cases, No. who have reached RNTCP Unit	Out of the HIV sero-positive persons referred count the number of persons who reached the RNTCP Unit. Similarly count the HIV sero-negative persons who reached the RNTCP Unit. The information on whether the person has reached the RNTCP Unit is available in the <u>column no. 9 of the Line-List</u>
c) Out of above (b) no. who have undergone complete Investigation	Now count the number of HIV sero-positive persons who have undergone complete investigation. Now count the number of HIV sero-negative persons who have undergone complete investigation. The information on whether the person has undergone complete investigation is available in the column no. 10 and 13 of the Line-List. In case of suspected pulmonary TB check column no. 10. If three sputum examinations are done, it means the patient has undergone complete investigations. In case of suspected Extra-pulmonary TB check column no. 13. If the patient has undergone relevant investigation for Extra-pulmonary TB, it means the patient has undergone complete investigations.
d) Out of the above persons undergoing complete investigation(c), No. diagnosed as having:	Count the total number of HIV sero-positive persons diagnosed as TB. Count the total number of HIV sero-negative persons diagnosed as TB. The information on the persons diagnosed as TB is available from <u>column no. 14 of the Line-List.</u>
(i) Sputum Positive TB	Out of the HIV sero-positive TB patients count the number of sputum positive TB. Out of the HIV sero-negative TB patients count the number of sputum positive TB. The information on whether the person is diagnosed as sputum positive TB is available from <u>column no. 15 of the Line-List.</u>
(ii) Sputum Negative TB	Out of the HIV sero-positive TB patients count the number of sputum negative TB. Out of the HIV sero-negative TB patients count the number of sputum negative TB. The information on whether the person is diagnosed as sputum negative TB is available from <u>column no. 15 of the Line-List.</u>

(iii) Extra-Pulmonary TB	<p>Out of the HIV sero-positive TB patients count the number of Extra-pulmonary TB.</p> <p>Out of the HIV sero-negative TB patients count the number of Extra-pulmonary TB.</p> <p>The information on whether the person is diagnosed as Extra-pulmonary TB is available from <u>column no. 15 of the Line-List.</u></p>
e) Out of above (d), diagnosed TB patients, number receiving DOTS	<p>Out of the HIV sero-positive TB patients count the number of persons receiving DOTS.</p> <p>Out of the HIV sero-negative TB patients count the number of persons receiving DOTS</p> <p>Include only those persons who are being treated with DOTS and whose TB number is available. Referring to column no. 16 and 19 of the Line-List will give this information.</p>

Section III: REFERRAL OF DIAGNOSED TB PATIENTS FROM RNTCP TO VCTC

INDICATOR	WHAT SHOULD BE WRITTEN
a) No. of TB patients attending VCTC (referred or Direct Walk-In)	<p><u>Referred Patients</u> Referring to the Counselling register, count the number of persons who have been referred from RNTCP Unit (I). This information is obtained from <u>column no. 3 and 11 of the Counselling Register</u></p> <p><u>Direct Walk-In Clients</u> Check column no. 3 and 11 of the Counselling register to see whether any diagnosed TB patient came on his own to VCTC. Count these known diagnosed TB patients who came as direct walk-in clients to the VCTC (II). Add (I) and (II) to get the total number of TB patients (a) attending VCTC. Note that those persons who have been referred from VCTC to RNTCP are excluded in this section</p>
b) Out of above (a), No. Tested for HIV	<p>Count the number of persons who consented for the HIV test(b) out of the above mentioned diagnosed TB patients Column no. 13 of the counselling register contains information on whether the person has consented for the HIV test. Therefore check column no's. 3, 11 and 13 to get the complete information</p>
c) Out of above (b), No. detected to be HIV Positive	<p>Now count the number of persons who were found to be HIV positive out of (b) Column no. 15 of the counselling register contains the HIV test result. Therefore check column no's. 3, 11 , 13 and 15 to get the complete information</p>

Section IV: IEC ACTIVITIES

<p>No. of clients/patients receiving information / counselling on TB</p>	<p>There is no column in the Counselling register to record the information about the persons receiving counselling on TB. The Counsellor can add an extra column, after remarks column, titled as 'Information/Counselling on TB'. If the Client has been given information on TB, write 'YES'. Count the number of persons who received information/counselling on TB from the column 'Information/Counselling on TB' of the Counselling Register. Remember to include not only new patients, but also follow up patients who have come for counselling and have been imparted information on TB again.</p>
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The monthly report signed by the In-charge VCTC should be completed by the 5th/6th of the month and sent to District Nodal Officer for HIV/AIDS, District TB Officer and the SACS office so as to reach latest by 10th of the month. The District TB Officer compiles the reports of all VCTC in the district reports monthly to the state and reports quarterly in the RNTCP Quarterly report to the Centre and the State. The reports are dispatched by the DTO with a gap of one quarter i.e. TB/ HIV report for the first quarter of 2005 will be reported in the RNTCP programme management report of the second quarter, 2005

Process of Sending Monthly Report

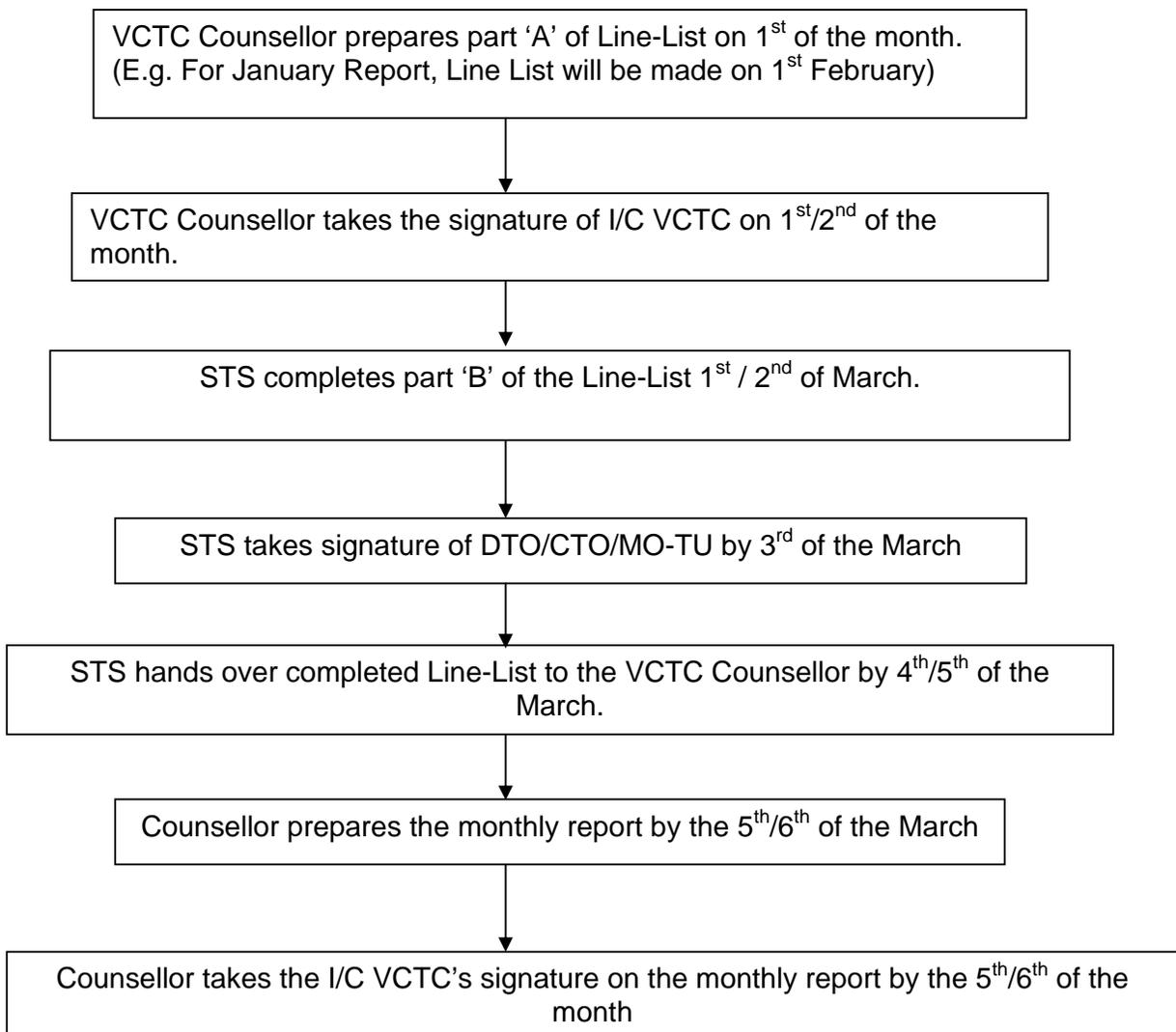
At District Level

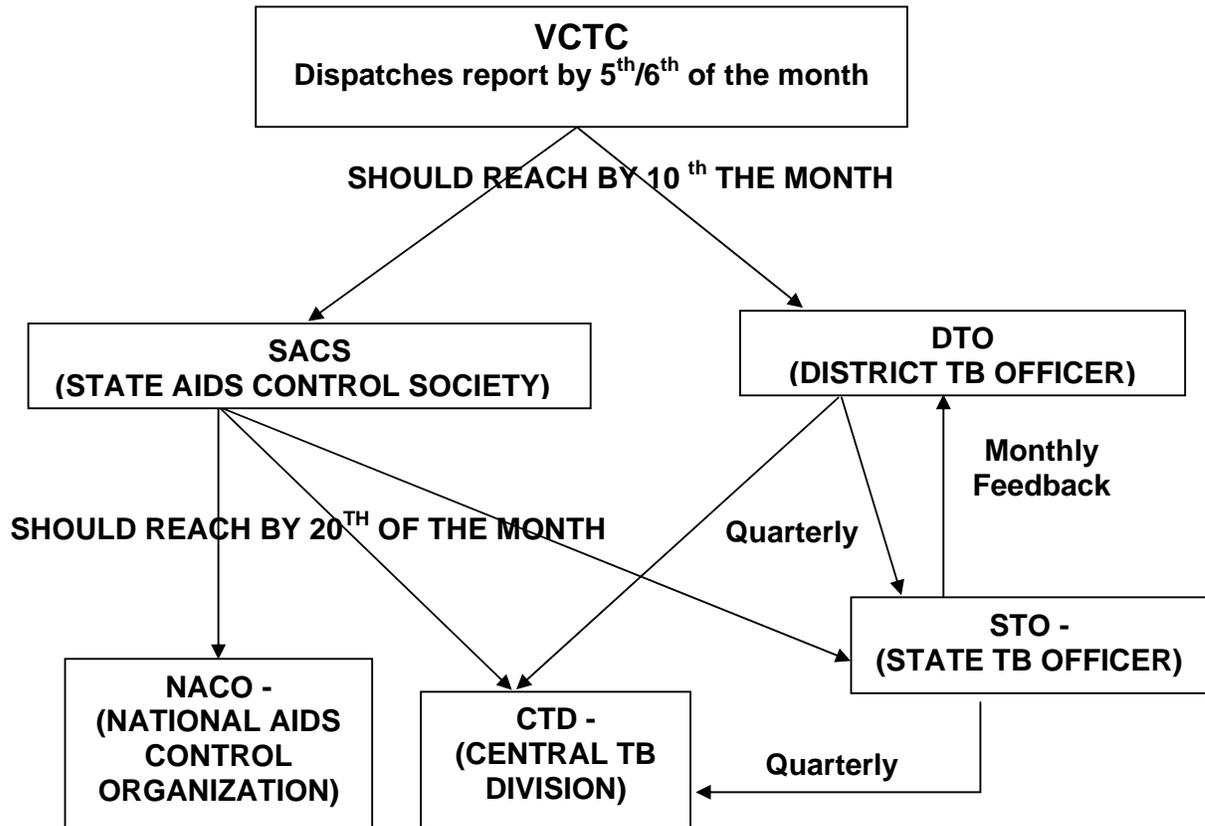
The report will be sent by the VCTC to the District Nodal Officer for HIV/AIDS, District TB Officer and the State AIDS Control Society. The report should reach State AIDS Control Society by 10th of the month. A copy the TB/HIV report is given to the concerned District Tuberculosis Officer/City TB Officer who in turn compiles the reports and reports quarterly in the RNTCP programme management report. The Counsellor also sends a copy of the Line-List to the SACS

At State Level

At the state level, at the SACS the information on TB/HIV activities will be compiled and a centre-wise report along with the monthly report for the entire state will be sent to NACO and CTD by the 20th of every month. A copy of this report will also be sent by SACS to the State TB Office.

Process of Preparing the Monthly Report





Role of VCTC and RNTCP Staff

Role of Counsellor

1. Referral of suspected TB patients to microscopy centre
2. Impart information on TB to all the VCTC Clients.
3. Maintain confidentiality, follow-up of drop-outs partner counselling and testing, creating community awareness
4. Know where to refer patient for sputum microscopy
5. Educate HIV positive persons about the symptoms and signs of TB and importance of reporting to the Counsellor/ Designated microscopy centre at the earliest.
6. Encourage HIV positive clients with TB to reveal their HIV status to the treating physician
7. Provide VCT services to patients referred from RNTCP
8. Send the report of TB/HIV activities regularly to State AIDS Control Society, District Nodal Officer of AIDS and District TB Officer every month

9. Send a copy of Line-List to the State AIDS Control Society every month duly signed by all the concerned staff.

Role of STS/STLS

1. Ensure that the Lab Tech of DMC, mentions name of VCTC in TB Lab Reg.
2. Ensure and maintain strict confidentiality in dealing with all cases of TB/HIV.
3. If asked by TB patients, provide information about HIV/AIDS and the facilities available for HIV Counselling and testing.
4. Ensure the availability of Sputum Laboratory forms and DOTS directory at the VCTC
5. Give feedback to the VCTC counsellors regarding the TB status of persons referred from VCTC to Microscopy Centres.
6. Co-ordinate with the VCTC counsellors for preparing and completing the line-list.

Role of MO-VCTC

1. Ensure Counsellors screen VCTC clients for symptoms of TB
2. Ensure Counsellors are attending the monthly review meetings of RNTCP
3. Check the counsellors registers to verify if documentation is being done properly
4. Ensure that the Counsellors coordinate with the RNTCP staff and prepare the line-list and monthly report
5. Ensure that the report is complete and correct and duly signed.
6. Ensure the timely submission of reports.

Role of MO-TU

1. Ensure Lab Technician records referrals received from VCTC in TB Laboratory register.
2. Ensure STS completes the line-list and hands over the completed Line-List to the Counsellor on time.
3. Ensure confidentiality of HIV status is maintained.
4. Ensure the prevention of spread of HIV through safe injection practices
5. Refer TB patients suspected to have HIV to VCTC
6. Refer known HIV positive patients to VCTC for Counselling

Role of DTO

1. Facilitate the Quarterly meetings of District TB/HIV Co-ordination Committee.
2. Ensure the availability of the logistics to all the VCTC's in the district
3. Ensure Lab Technician records referrals received from VCTC in TB Laboratory register.
4. Ensure the STS coordinates with the Counsellor for completing Line-List

5. Conduct regular monthly meetings between VCTC and RNTCP staff
6. Ensure confidentiality of HIV status is maintained.
7. Ensure VCTC and RNTCP staffs are trained in TB/HIV.
8. Ensure appropriate measures are taken to prevent spread of TB in facilities caring for HIV-AIDS
9. Ensure the prevention of spread of HIV through safe injection practices
10. Timely submission of TB/HIV report to CTD and STO. DTO reports quarterly in the programme management reports. The reports are dispatched with a gap of one quarter i.e. TB/ HIV report for the first quarter of 2004 will be reported in the RNTCP programme management report of the second quarter

ANNEXURES

Annex 1

LINE-LIST OF PERSONS REFERRED FROM VCTC TO RNTCP

REPORTING MONTH: _____ YEAR _____

NAME OF VCTC: _____

NAME OF DISTRICT: _____

TO BE COMPLETED BY VCTC COUNSELLOR								TO BE COMPLETED BY STS												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Sr. No.	PID NO.	Complete Name & Complete Address	Age	Sex	New or Follow Up Patient	Date of referral	Name of RNTCP Unit referred to	Has Person reached RNTCP Unit (Yes/No)	Has Patient undergone three sputum Examination -(Yes/No)	Date of Sputum Examination	Sputum Result - (Sputum Positive/Sputum Negative) (If three sputum examinations are done)	Date and Investigation Report for Extrapulmonary TB	Is patient diagnosed as TB -Yes or No	If diagnosed as TB, specify whether patient is sputum positive TB, sputum negative TB or Extrapulmonary TB	Is patient receiving DOTS or Non-DOTS	Treatment Category	Date of Starting Treatment	TB No.	Remarks	
Sign of Counsellor MO- VCTC Sign of Counsellor Sign of Date of completion:								Signature of STS Date of Completion:												
												Signature of DTO/CTO/MO-TU								

ANNEXURES

Annex 2

REPORT OF TB/HIV ACTIVITIES AT VOLUNTARY COUNSELLING TESTING CENTRE
FOR THE MONTH OF _____ YEAR _____

Name of VCTC:

Name of the District:

I. TOTAL NUMBER OF CLIENTS ATTENDING VCTC:

a) No. of clients who received Pre-test Counselling	
b) Out of above (a), No. detected to be HIV Positive	
c) No. of HIV Positive and HIV Negative Follow-up Clients who attended VCTC	

II. REFERRAL OF SUSPECTED TUBERCULOSIS CASES FROM VCTC TO RNTCP

	HIV positive	HIV Negative
a) No. of persons suspected to have TB referred to RNTCP Unit		
b) Out of above (a) referred cases, No. who have reached RNTCP Unit		
c) Out of above (b) no. who have undergone complete Investigation		
d) Out of the above persons undergoing complete investigation(c), No. diagnosed as having:		
(i) Sputum Positive TB		
(ii) Sputum Negative TB		
(iii) Extra-Pulmonary TB		
e) Out of above (d), diagnosed TB patients, number receiving DOTS		

III. REFERRAL OF DIAGNOSED TB PATIENTS FROM RNTCP TO VCTC

a) No. of TB patients attending VCTC (referred or Direct Walk-In)	
b) Out of above (a), No. Tested for HIV	
c) Out of above (b), No. detected to be HIV Positive	

IV. IEC ACTIVITIES

No. of clients/patients receiving information / counselling on TB	
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Signature of Medical Officer - Incharge VCTC

Name of Medical Officer- Incharge VCTC



ANNEXURES