INTENSIFIED TB CASE FINDING IN THE REPUBLIC OF UZBEKISTAN

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INTENSIFIED TB CASE FINDING – is an active TB screening, particularly among socially vulnerable population groups.

- Guidelines for intensified tuberculosis case-finding and isoniazid preventive therapy for people living with HIV in resource-constrained settings
- World Heath Organization, 2011

Summary
- The purpose of the current document is to provide guidelines to the national TB and AIDS control programs by updating the current WHO recommendations on the basis of new data available and considering the changing situation in the field of TB and HIV prevention, treatment and care.
INTENSIFIED TB CASE FINDING – is an active TB screening

• In response to the dual epidemics of HIV and TB, the World Health Organization (WHO) recommended to implement 12 joint TB/HIV activities in the framework of the main services of HIV and TB prevention, treatment and care. They include interventions which are aimed at reduction of TB incidence and mortality among PLWH, such as provision of ART and application of “The 3 Is” approach in management of HIV/TB: intensified TB case-finding, isoniazid preventive treatment (IPT) and TB infection control.

• A high level of previously non-diagnosed TB is common among PLWH. Intensified case-finding and TB treatment among PLWH helps stop the TB transmission, reduce the incidence and postpone death. It is especially important that active TB screening gives an opportunity to perform preventive treatment of people with no developed symptoms or signs of TB.
Republic of Uzbekistan

- Total area: 447,8 thousand sq. km.
- Population density: 50.1 persons./sq. km.
- Population growth: +3.9%
The structure of management and interaction within the phthisiopulmonology service in the Republic of Uzbekistan.

- Republican non-specialized medical facilities
- Republican TB sanatoria (including children’s sanatorium and bone TB sanatorium)
- Republican Specialized Research and Practice Medical Center of Phthisiology and Pulmonology
- Regional Health departments and the Health department in the Administration of Tashkent, MH of Karakalpaqstan
- District (municipal) medical facilities
  - District non-specialized medical facilities
  - District (municipal) TB dispensaries, TB units
  - School and pre-school TB facilities
  - Pulmonology units at the central district (municipal) multidisciplinary polyclinics
  - Rural ambulances, polyclinics
- Regional TB sanatoria
- Pulmonology departments and units at the regional multidisciplinary centers, including children’s
- Regional TB dispensaries and hospitals
- Inter-district, municipal TB hospitals
- Regional TB sanatoria
- Departments of tuberculosis and internal disease medicine at the institutes and University
- Specialized service at the departmental facilities

Keys:
- Bold solid line—administrative management and methodological guidance
- Solid line—methodological guidance
- Dotted line—methodological assistance and interaction
Prior to 1990-s, mass fluorography examinations in Uzbekistan were used for detection of tuberculosis, which had a very low TB detection rate. Later, due to transition to the market economy and financial constraints, we started looking for some new ways to perform TB screening among the population.
In 1998 in the Republic of Uzbekistan the implementation of the WHO recommended DOTS strategy was initiated in a pilot region – Karakalpakstan, where due to the unfavorable environment the TB rates were the highest in the country. Gradually diagnostics and treatment by the DOTS strategy expended to other regions of the country. In 2003, based on the RU MH Executive Order #160 (03.04.2003) this strategy was implemented in the entire country.
TB detection algorithm

Each person with a productive cough and other symptoms can apply to any PHC facility – starting with a rural ambulance (where there are sputum collection rooms) and have examination done for TB. The use of x-ray methods is appropriate in cases of negative results of the bacteriological examinations. It allows detection of active TB and in some cases – destruction process in some patients.
But due to various reasons the percentage of bacteriologically positive patients among all new cases remained quite low and did not reach 70% detection rate for MbT+ patients, recommended by the WHO. Considering the above and for the purpose of improvement of TB detection, intensified TB case-finding at early stage of the disease and especially among the vulnerable population groups is being performed in the country.
In 1995, the MH Executive Order # 552 on the introduction of a differentiated approach to fluorography examination (i.e. among TB risk groups and mandatory occupational screening groups) was issued in the Republic.

*High risk group*: persons in contact with patients or animals with active TB

*Patients* with chronic non-specific diseases of the respiratory tract including pulmonary dust disease; patients with diabetes mellitus, stomach and duodenum ulcer; persons receiving corticosteroid, cytostatic and radiotherapy; psychiatric patients, HIV-infected individuals, surgical patients, alcohol and substance abusers; homeless people, migrants and women in a postpartum period.

*Mandatory occupational screening group* (school and preschool staff, employees of public services, communal services and amenities, public catering enterprises, grocery stores and public transportation; draftees, medical workers, TB facilities’ staff, livestock breeders).
RESULTS OF FLUOROGRAPHY EXAMINATIONS OF “RISK GROUPS” (%)

- сахар. диабет: 0.8
- язв. боль: 0.5
- ХОБЛ: 0.8
- Гормонозавис.: 0.5
- Алког. и нарком.: 0.5
- Психич. б-ные: 0.8
- Контак. с ТБ: 0.3
- Снятые с д/учета: 0.5

0.3
Since the Government of the Republic and the RU MH pay special attention to health improvement among women at fertile age, retired and lonely people, the Resolution of the Cabinet of RU Ministers #520 (1999) on the annual fluorography examination of those people was adopted.
RESULTS OF FLUOROGRAPHY EXAMINATIONS AND TB DETECTION (%).  
(RESOLUTION OF THE CABINET OF RU MINISTERS #520 of 07.12.1999).
For the purpose of further improvement of the TB service and strengthening TB control, the National program was established by the Resolution of the RU Cabinet of Ministers #62 “On Additional Measures Aimed at Decrease of TB Incidence in the Republic of Uzbekistan for 2011-2015” of March 5, 2011.
The National program gives the provision for improvement of the regulatory framework aimed at protection of rights and interests of the TB patients and medical workers, wide-ranging activities on TB prevention, early diagnostics and treatment, optimal use of the inpatient and sanatorium beds, regular and advance training of the medical staff, additional equipping of the TB dispensaries and hospitals with the modern equipment, development of the informational and educational materials and programs for TB prevention among various population groups and ensuring close interaction and coordination of work with the governmental and international agencies in the field of TB control.
Main achievements in the implementation of the Program
“On measures for improvement of TB detection, diagnostics and treatment”

In the Republic there are over 300 fluorography units, both stationary and mobile, 14 vehicles equipped with fluorography units “ProScan-2000” and the stationary digital fluorography equipment in the medical centers for adolescents.

Currently, 200 digital fluorography units are being supplied to the district general health care facilities.
Detection of chest pathology by fluorography examination
Case-finding methods for detection of new active TB cases

2012 (operation data)

- Chest X-ray: 83.4 in 2011, 82.12 in 2012
- Microscopy: 14 in 2012
- Histology: 2.6 in 2011, 2.65 in 2012

2012
INTENSIFIED TB CASE-FINDING

- Fluorography examination of the population, along with microscopy, is the main method of TB screening which allows early TB detection, especially in the risk groups which are most susceptible to TB.

- Management of TB detection by the fluorography method in the PHC allows timely detection of early stage forms of TB (and other lung diseases) among adults and adolescents.

- Adequate implementation of the detection algorithm, optimization of the fluorography examination service, purchasing modern digital fluorography units, proper planning of the annual fluorography examinations of people subject to screening will allow improved efficiency of intensified early detection of pulmonary TB, start of timely adequate therapy and therefore decrease of TB incidence and transmission of infection in the population.