

HIV/TB Co-Infection During The Year 2015

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A) BACKGROUND: The human immunodeficiency virus {HIV} is an infection associated with serious disease, persistently high costs of treatment and care, significant number of deaths and shortened life expectance .TB is the most common presenting illness among people living with HIV, including those taking antiretroviral treatment and it is the major cause of Human Immunodeficiency virus-related death.The co-infection with the human immunodeficiency virus {HIV} and tuberculosis {TB} is a major public health problem throughout the world. People living with HIV are more likely to develop TB disease during their lifetime than HIV-negative persons. Worldwide, TB is one of the leading causes of death among people living with HIV whose impaired immune systems make them particularly vulnerable to the devastating effects of TB. HIV is the strongest risk factor for developing tuberculosis {TB} disease.

B) Objective: To evaluate the presence of HIV/TB co-infection in Albania during the year, 2015.

Methods: This study was conducted from January to December 2015 at the University Hospital Center “Mother Theresa” in Tirana .This was a descriptive cohort study. Evaluating patients’ files with HIV/AIDS infection followed at the Outpatient Clinic for HIV/AIDS, part of Infectious Service, University Hospital Center, “Mother Teresa”, Tirana, Albania. Out of 87 patients with HIV infection, we have included 4 patients with co-infection HIV/TB. Evaluation of the epidemiological data, clinical and therapeutic of TB patients encountered in HIV/AIDS. Data were subjected to descriptive and correlation analyses. Simple percentages were used to present the results.

C) Results: In 2015, approximately 4.6% of the 87 HIV positive people in Albania are infected with TB from 87 HIV positive cases, 4 cases have TB and HIV co-infection. 100 % of HIV/TB cases were on antiretroviral therapy {ART}. For the year 2015, four HIV/TB new cases were reported. According to the distribution by sex, 50% of them were males and 50% were females. The male -female ratio were close to one.100% of reported cases had pulmonary TB and 100% of them reported sputum positivity for acid fast bacilli. 25 % {1 case out of 4 in total} of people with HIV/TB co-infection were dead. 50% {1 death case out 2 cases} of HIV positive TB co-infected women were died during the year 2015. TB deaths among HIV positive people account for 16.6% {one death case out of six deaths in total} of all HIV positive deaths, in 2015. Most of the cases or 75 % of them belong to the age group 30-50 year old. About 50% of new HIV/TB co-infected patients were users of drugs

and 50% of them had been refugees in 2015. Drug use result in increased HIV/TB co-infection burden.75% of HIV/TB co-infected patients living in difficult economic conditions and were unemployed and uninsured.

D) Keywords: TB; HIV; AIDS; Co-infection.
Introduction

The human immunodeficiency virus {HIV} is an infection associated with serious disease, persistently high costs of treatment and care, significant number of deaths and shortened life expectance (1) .TB is the most common presenting illness among people living with HIV, including those taking antiretroviral treatment and it is the major cause of HIV-related death (2). HIV is the strongest risk factor for developing tuberculosis {TB} disease (10).

In 2014, 36.9 million people were living with HIV (3). India accounted for 27% of global TB notifications in 2014, followed by China (14%). Globally, 12% (1.2 million) of the 9.6 million new TB cases in 2014 were HIV-positive. (4). The proportion of TB cases co-infected with HIV was highest in countries in the African Region. In parts of Southern Africa, more than 50% of TB cases were co-infected with HIV (4). According to the WHO, there were an estimated 190 000 TB deaths among HIV-positive men and 140 000 among HIV-positive women in 2014 (4). There were an additional 55 000 {range, 50 000–60 000} TB deaths among HIV-positive children, equivalent to 14% of the total number of HIV-positive TB deaths. Of the 5.2 million incident pulmonary TB patients notified

globally in 2014, only 3.0 million (58%) were bacteriological confirmed (4).The number of people living with HIV continues to increase, in large part because more people globally are accessing antiretroviral therapy and as a result are living longer healthier lives .TB now ranks alongside HIV as a leading cause of death worldwide (3-4). TB is still the leading case of HIV mortality. In most of the world, more men than women are diagnosed with TB and die from it (8). TB is among the top killers of women of reproductive age (9).Much more needs to be done in terms of prevention, earlier identification of HIV-associated TB, coverage and delivery of life-saving interventions (5-6-7). In the case of TB, the links between poverty and disease burden have been documented for many years (7). The poverty as a major barrier to health and health care (7). According to the WHO, all people living with HIV, wherever they receive care, should be regularly screened for TB

(10). The current challenge is to find ways of preventing both TB and HIV, and to improve diagnosis and management of co-infection (11). The co-epidemic of tuberculosis {TB} and human immunodeficiency virus {HIV} is one of the major global challenges in the present time (12-13).

G) Results

In 2015, approximately 4.6% of the 87 HIV positive people in Albania are infected with TB {from 87 HIV positive cases, 4 cases have HIV and TB co-infection}. 100 % of HIV/TB cases were on antiretroviral therapy {ART}. Based on the statistics Albania is the country with low number of HIV positive cases and with low number of HIV positive TB cases. The burden of disease through HIV/TB co-infection is not high in Albania but it should take into consideration because the number of HIV positive cases is increasing in years and risk behaviors associated with HIV and AIDS are present in the population. For the year 2015, four HIV positive TB new cases were reported. According to the distribution by sex, 50% of them were males and 50% were females. The male -female ratio were close to one. 100% of reported cases had pulmonary TB and 100% of them reported sputum positivity for acid fast bacilli. 25 % {1 case out of 4 in total} of people with HIV/TB co-infection were dead. 50% {1 death case out of 2 cases} of HIV positive TB co-infected women were died during the year 2015. The year 2015 had the largest number of HIV / TB new cases among women. Out of 5 women with HIV / TB {from 2004 until 2015}, 2 new cases belong in 2015. TB deaths among HIV positive people account for 16.6% (one death case out of six deaths in total) of all HIV positive deaths, in 2015. Most of the cases or 75 % of them belong to the age group 30-50 year old. HIV and TB affect women and men when they are economically and reproductive active. HIV and TB affect women in their reproductive age. Women have a higher fatality in their early reproductive ages. The impact of the HIV/TB co-infection disease is strongly felt by their children and families. About 50% of new HIV/TB co-infected patients were users of drugs and 50% of them had been refugees in 2015. It was observed that there are the links between the HIV/TB co- infection and using drugs or being a refugee. Drug use result in increased HIV/TB co-infection burden. 75% of HIV/TB co-infected patients were living in difficult economic conditions and were unemployed and uninsured. HIV and TB co-infection disease is linked with poverty and affect the most vulnerable groups.

E) Conclusions: The presence of TB increased morbidity in people with HIV infection. Drug use result in increased HIV/TB co-infection burden. The co-infection HIV/ TB is more destructive than either disease alone. HIV/TB co-infection affect women and men when they are economically and reproductive active. Women have a higher fatality in their early reproductive ages.

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