Final Abstract Number: 47.004

Session: Tuberculosis & Other Mycobacterial Infections

Date: Friday, June 15, 2012 Time: 12:45-14:15

Room: Poster & Exhibition Area

Assessment of tuberculosis and HIV co-infection among patients attending tuberculosis clinic in Felege hiwot hospital, 2009-2010, Bahir Dar, Ethiopia

B. Bevene

Amhara NRS Health Bureau, Bahir Dar, Ethiopia

Background: In Ethiopia, due to exacerbation of HIV/AIDS, tuberculosis has become a major public health burden. The aim of this study was to assess TB and HIV co-infection among patients who attended TB clinic during September 2009 to August 2010 in Felege Hiwot Referral Hospital, Ethiopia.

Methods: A retrospective cross-sectional study design conducted at Felege Hiwot referral hospital from May 26 to June 05, 2011. A one-year data from the patient's registry was collected using a check list which prepared to fit with registry and checked for completeness during data collection period. Data entry and statistical analysis was made using Epi Info 3.5.3.

Results: A total of 606 TB cases and 24 deaths were reported during 2009-2010. The CFR was 4%. Males constituted 61.1% (370) and the median age was 24 years. Thirty three percent (159) of TB cases were positive for HIV antibody. TB-HIV co-infection in females and males was 39.1% (74) and 29.8% (85) respectively. EPTB constituted 48.0% (291) of the total tuberculosis cases and 40.1% (82) PTB sputum smear -ve cases were positive for HIV. The male-female ratio of PTB and EPTB was 1.42 and 1.64 respectively. Pulmonary TB smear positivity has an association with HIV status (OR = 0.48, P-value = 0.041). But type of tuberculosis by site of infection, (OR= 1.41, P-value = 0.075), age (OR= 1.26, P-value = 0.37), sex (OR = 0.66, P-value = 0.41) and residence (OR = 0.66, P-value = 0.41)did not show statistical significant association with HIV status. The likely hood of dying among TB-HIV co-infected cases had 9.3 times more risk of dying than from those who had only tuberculosis (OR = 9.3, p-value = < 0.001).

Conclusion: The TB-HIV co-infection rate and the case fatality among all TB cases was 33.5% and 4% respectively. The trend of TB-HIV and tuberculosis cases not declining and significant numbers of cases were also left with unknown HIV status. Therefore, counseling and testing of all TB cases should be strengthened in order to maximize health care and survival.

http://dx.doi.org/10.1016/j.ijid.2012.05.939

Final Abstract Number: 47.005

Session: Tuberculosis & Other Mycobacterial Infections

Date: Friday, June 15, 2012 Time: 12:45-14:15

Room: Poster & Exhibition Area

Risk factors for failure in treatment of Pulmonary Tuberculosis (PTB): Study from a rural medical college hospital in south India

P.N. Venkatarathnamma, S.A. Bhatta*

Sri Devaraj Urs Medical College, Kolar, KARNATAKA, India

Background: Tuberculosis (TB) is a major global health problem, with India accounting for one-fifth of the global TB cases. Each year nearly 2 million people in India develop TB, of which around 0.87 million are infectious cases and annually around 330,000 die due to TB.

Modern Anti-tubercular treatment (ATT) can cure virtually all patients provided correct combination treatment is taken. Some patients with tuberculosis fail, relapse or default from initial treatment. There is increased risk of morbidity and transmission, among those on Category II ATT regimen.

Methods: The objective was to evaluate the factors responsible for initial treatment failure and default, subsequent retreatment and outcome.

Methods: All cases of pulmonary tuberculosis started on Category I RNTCP (Revised National Tuberculosis Control Programme called DOTS elsewhere) from January 2011 to December 2011 were analysed for treatment given, risk factors of treatment failure and outcome.

Results: A total of 245 cases were diagnosed as PTB(Pulmonary Tubeculosis) and started on Category I ATT.

18 were retreatment cases who had relapse, or defaulted, with male: female ratio of 17:1.

Of these 18, who were started on category II regimen, risk factors for initial treatment failure were undernourishment (100%), illiteracy (44%), rural patients (72%), smoking (55%), deliberate neglect (16%), alcohol abuse (27%), Diabetes mellitus (16%), vomiting (16%) and ex-miners.

Retreatment was successful in 9 of these patients, while 3 patients further defaulted. 3 patients on retreatment died, 1 due to massive hemoptysis and 2 due to respiratory failure. 3 were lost for follow up.

Conclusion: Retreatment of TB patients is a challenge to the TB control services, as they require longer treatment duration with at least 5 drugs (including an injectable). They are also more likely to harbour and transmit drug-resistant tuberculosis with poor treatment outcomes.

Default from treatment was high in rural areas.

Preventing the need for retreatment in the first place is the best strategy.

Identifying patients that confer higher risk of relapse, failure, or default from primary TB treatment, and targeted interventions such as health education, substance abuse counselling, enhanced tracking, or reinforcement of DOTS supervision may help to reduce the need for retreatment, resulting in cost savings and diminished morbidity and transmission.

http://dx.doi.org/10.1016/j.ijid.2012.05.940