Introduction: Tuberculosis (TB) is a common problem of public health in developing countries. The incidence of tuberculosis is increasing in Senegal despite National Program against the tuberculosis (P.N.T), with free TB drugs, and good BCG vaccine coverage. The aim of this study is to evaluate the incidence of pulmonary TB and the morbidity of this disease in pediatric patients.

Methods: Retrospective study was carried out at Albert Royer Children Hospital of Dakar Senegal. From January 1st, 2001 to December 31, 2006, all the children aged 0 to 15 years, admitted for pulmonary TB were included. The criteria of inclusion were:

- Close contact with TB,
- Symptoms suggesting pulmonary TB (chronic cough (>15 days), fever (>15 days), hemoptysis), suspected radiographic pictures and positive tuberculin skin test (PPD),
- Demonstration of acid-fast bacilli (AFB) in biological fluid (gastric fluid, pleural fluid, sputum),
- Failure to response of non specific antibiotics and clinical and radiological improvement with tuberculosis’s treatment.

Results: From January 1st, 2001 to December, 31, 2006; 21,193 patients were admitted at Albert Royer Children Hospital. 168 patients had pulmonary tuberculosis (0.8%). The mean age is 82 months (range 2 to 180 months). More than 60% of the patients have 5 years old. The mean duration of hospitalization is 26 days. There is 53% male versus 47% female (sex ratio: 1.12). More than 80% of children came from Dakar suburban area. A history of contact TB was found in 65% of the patients.

Pulmonary lesions are the most common pattern: 125 cases (74.5%), followed by pleurisy 29 cases (17.2%) and miliary 14 cases (8.3%). Bacteriological studies are positive for 66 patients (39.3%). 98 patients have malnutrition (58.3%). Anemia is found in 97 children (57.7%), HIV infection in 9 cases (3.57 %), however there was 1 cases of measles.

Therapeutic regimens are: RHZ for 97 patients (57.7%), RHES for 62 (36.9%) and RHZS for 9 (5.4%).

The mortality rate was 5.4% (9cases). 154 children (92.2%) was recovery.

Conclusion: Pulmonary tuberculosis is the common localization in children. High prevalence of TB in Africa is linked with AIDS infection and poor social condition of the population.

Keys words: Tuberculosis, Children, Therapeutic regimens, Mortality rate.