Conclusion:

- The flourochorme method showed 195 positive samples (39 %), while ZN gave 126 positive samples (25.2 %).
- Flourochrome methed was more sensitive than ZN method (P = 0.001). However, the later was more specific.
- The disease was fairly more common among males than females.
- The disease fairly affected young adults in compared to elder people.
- Ziehl Neelsen method is still considered to be the suitable routine method for diagnosing pulmonary tuberculosis.
- Flourochrome method can be used as screening method. Any negative results should be accepted, and any positive results should be confirmed.

Recommendations:

- Further indepth studies are recommended to evaluate the sensitivity and specificity of ZN Flourochrome staining techniques.
- Although less sensitive than flourochrome ZN remains the method of choice for microscopic examination of sputum, since it is associated with low risk of infection.