

## **Evaluation of TB surveillance system in district Pakpattan Punjab Pakistan November, 2007.**

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**Background:** Tuberculosis is major public health problem. Globally an estimated 3 million people die due to TB annually. Pakistan ranks 8<sup>th</sup> among countries with highest burden of TB in world with incidence of 181/100,000 and mortality 29/100,00 population.

Purpose of evaluation was to find strengths and challenges of TB Surveillance system in Pakpattan (population of 1.6 million).

**Methodology:** Evaluation carried out during October-November, 2007. Existing Surveillance systems were evaluated using CDC updated Guidelines for Public Health Surveillance System Evaluation. Stakeholders were identified and interviewed.

**Results:** Two systems exist in district Pakpattan. TB Control Program (TB-CP) and Health Management Information System (HMIS). TB-CP has good simplicity, Data Quality, Acceptability, stability and Sensitivity (detecting 1.9 times more cases than expected).

System is poor in timelines (quarterly reporting), and Predictive Value Positive (PVP)12% (665 lab-confirmed /5512 suspected based on case-definition) with moderate Representativeness (only public health facilities). HMIS is collecting information from first level health care facilities and some secondary and tertiary care hospitals. HMIS is simple Stable, Acceptable with high sensitivity (detecting 2.5 times more cases compared than expected). Have moderate Representation (private sector not included) but poor in Timelines (monthly reporting) and lacks PVP (no laboratory component).

**Conclusion:** TB DOTs program should integrate with HMIS and diagnostic capacity needs to be added to these surveillance system. Surveillance case definitions need to be reviewed to make a balance between sensitivity and specificity.

**Key Words:** Tuberculosis, TB-DOTS, Surveillance Evaluation, Pakistan.