About 40-50% of the X-ray equipment were unused all over the country because of inefficient technical understanding, poor selection of equipment, poor planning in housing the unit, inadequate maintenance facility and lack of trained personnel. The estimated losses due to these reasons alone amounted to Rs 71 million in 1969. There was an urgent need for development of infrastructure and utilisation of the costly and imported equipments. The NTI had gained vast experience and expertise by running its own mobile X-ray fleet and stationery X-ray units, as well as attending to the problems that arose with the stationery units at the DTCs and hospitals. The above is a mere tip of the ice berg of the problems related to the proper functioning of the sophisticated equipments in the country⁸².

3.8. Results of the longitudinal survey

As reported in the second chapter, about 60 NTI personnel worked directly and almost everyone indirectly to complete the field work which began in 1961 and ended in 1968 on schedule. It took nearly as much time to analyse the data. Many experts came and assisted or interacted as short term consultants. A summary report was published in the WHO Bulletin in 1974. A fuller version is available in the library for reference⁸³.

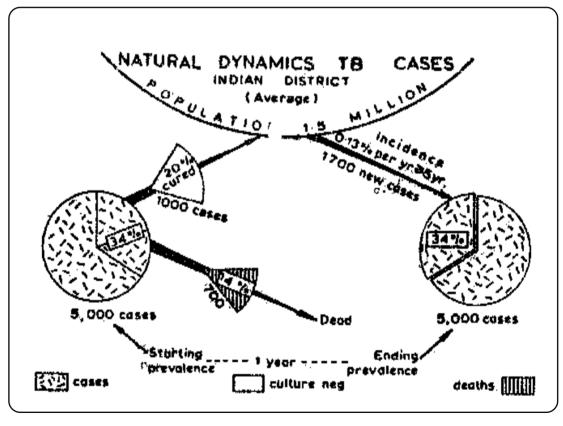
The paper, yielded vast credible information on the desired objectives. It provided insights into the disease dynamics and became a forerunner for new studies. The prevalence of tuberculous infection in the population was found to be about 30%. The annual incidence of infection was about 1%. overall incidence of infection ranged from 1.61 to 0.85%; the incidence of infection continuously increased in the higher age groups. However, the prevalence and incidence of infection showed a significant decrease during the five years in the age group 0-24 and 0-34.The average annual incidence rate of disease ranged from 79 to 132 per 1,00,000 population. The incidence among the newly infected (between two

rounds) was seven times the rate for those already infected. Those with >20 mm reaction had higher annual incidence rate of disease. Out of the 126 cases followed up during the 5 years, 49.2% died, 32.5% got cured and 18.3% continued to remain sputum positive. The incidence cases showed a natural cure rate of 20% and a mortality of 14% over the immediate observation period of one and a half years. This showed a higher natural cure indicating

that TB cases were not a uniform entity. There could be gradations from the point of view of diagnosis and ability to benefit from treatment⁸³.

3.9. Outcome of longitudinal survey – natural history of TB

Longitudinal surveys are time and resource consuming without yielding the immediate results. It requires courage to assume this type of work. The foresight made



Disease Dynamics: Natural History of Tuberculosis