INTRODUCTION

THE CHALLENGE:

The battle of the human race with tuberculosis dates back to antiquity. Historians are divided on the questions of the exact date and the mode of the first encounter. Certain pre-historic skeletons, a few preserved bones and joints in the planes of the Gangas, show pathological changes which are evidently tuberculous. Inscriptions on a few tablets found in Babylon contain references to the disease. A few mummies of Egypt show conditions simulating tuberculosis. All these evidences go to show that practically no ancient civilization was spared off the evil touch. Hippocrates gave the first description of the disease, recognised as "phthisis" at the time. Aristotle recognized the infectious nature of the disease, and wondered why a person in contact with the sufferer developed the disease, while a person in contact with dropsy did not do so.

In 1882, Robert Koch discovered the causative organism, the tubercle bacilli. Till that time it was almost a guerilla warfare. As man's attack in those days was at best a grope in the dark, it could not hit the target. Consequently, the casualties on the side
were quite high. The weak ones on his side succumbed in large numbers; those in better conditions were badly maimed; the fittest, of course, survived. Koch's momentous discovery led to further advances in the knowledge of the disease. Man acquired quite a number of lethal weapons against the dreaded enemy. The results were spectacular. Tuberculosis came down in rank in the list of the leading causes of death. But economically under-developed countries could not keep pace with those leading to failure, in the control of the disease.

Even in the present times, with all the modern knowledge man possesses, the disease exerts a profound influence on the morale and economy of every nation. The repercussions it produces, though chronic and less dramatic than the plague or the typhus, are no less severe. Ill health restricts working time, lowers productivity and calls for expensive medicines, and thus adversely affects national prosperity. This is the story in the usual course of life. But during wars and the following years of hardship, the problem assumes gigantic proportions as the disease takes a great toll of lives even in modern time. During famine and floods, when the native resistance of man crumples, the disease reaps a rich harvest. When measles or other debilitating diseases appear, tuberculosis
lurking in the body, joins hand with them and together have their hey day. The latest weapon in the enemy’s armamentorium are resistant strains and mutants. Certain atypical mycobacteria have also made their appearance. Their pathologic significance is still in the realm of conjecture.

Thus it is evident that man has suffered too long and too severely at the hands of this pestilence. Even now the enemy appears to be opening up new fronts. Hence a concerted effort has to be made from all fronts to control the disease.

The concepts of tuberculosis control have undergone a radical change in recent times. Previously it was thought that the primary infection conferred immunity on the individual and hence was considered a benign condition. Now it is increasingly recognised that primary infection, though innocuous in a majority of cases, is still a potential source of danger. So, from caring for the sick and the dying, the attention has been shifted to a search for the unrecognised cases among the apparently healthy. Early detection and appropriate management of all primary disease is the cornerstone of recent tuberculosis control programme.
For this, a thorough understanding of the various clinical manifestations and epidemiological and bacteriological aspects of the primary disease is essential. In the western countries and the U.S.A., innumerable studies were carried out. But the findings vary from place to place. This is especially true in India, where, as Dr. Bogen (1960) has remarked, the tuberculosis problem presents certain anomalies. According to him, findings here "contradict the lessons laboriously learned from previous experiences in other countries".

The various clinical and roentgenological manifestations are well seen in the young children; in adults, the clear cut picture is seldom seen. Hence this study was undertaken to demonstrate the epidemiological and bacteriological aspects of the disease as applied to the conditions obtaining in our surroundings. The frequency of the various clinical manifestations, as seen in our hospitals, are expected to be demonstrated by this study. As this is only a short term study (one year) one can only show the immediate prognosis of the primary infection. It is a well known fact that children below the age of 5 years are more prone to the
infection than an older age group. Hence this age

group has been selected. Broadly speaking, the extent

of the tuberculous infection in children is a reflection

of the disease in adults. Recent surveys have shown

that 40% of India's population is constituted of

children below the age of 15 years. In that context,

a study of the disease process in children will have

a definite significance.