Analysis of the existing debates in the field of health and medicine clearly indicates the prevalence of two distinct systems. This has often been noted as the emergence of two trends in medical practice: firstly as 'medicine of the species' and secondly as 'medicine of space'. Medicine of the species is primarily concerned with the biomedical tradition and is confined to the western medical system that is based on classification of diseases, diagnosis, finding cures and treatment. Medicine of social space has been concerned with preventive measures by improving the social, physical, and behavioural surroundings through interventions from civic and governmental bodies. The debate regarding the causes of tuberculosis indicates that there were two schools of thoughts in colonial India. One believed in the ecological factors and other believed in the etiological factors. People, who believed in the ecological factors tried to explain the occurrence of the disease in terms of a particular type of climate and its impact on the habits of population, their customary and other social conditions. The other group based its arguments on Germ-theory of the disease and explained the susceptibility of bacillus in a particular climate and to some extent the living condition of the host – the human body. There is an evident overlap in the explanations. The political and economic causes, which shaped the existing ecology, which probably was more explanatory, was missing in the official as well as in the professional circles. The present study has tried to combine these two conceptions. On the basis of the study, the following conclusions have been drawn:

- The debate on the various conceptions of tuberculosis and the measures that were taken to combat the menace clearly indicate the prevalence of two
traditions namely disease ecology and political economy. Both the traditions have had their impact on the understanding of disease and on planning for curative measures.

- India was a colony of Britain during the period when Europe had experienced two separate developments: a) there was reduction in mortality and morbidity due to increase in the general level of nutrition; and, b) there was incidence of diseases in the temperate world of other ecological surroundings, the so-called 'tropical diseases', due to an increasing interaction between the tropical and temperate regions.

- The environment in India changed in all aspects in terms of physical environment as well as the social environment. The change in activities like agriculture and the crafts, which were located in villages to industry and trade, which started to be concentrated in the crowded cities, did have an impact on the 'disease ecology' in the country.

- Cases of tuberculosis were on the rise. There was also an increased visibility of combative measures along with high-echoed debates at various levels. The obvious debate regarding tuberculosis during the colonial period remained centred around three themes, namely 'question of severity', 'the causative factors' and 'the possible combative measures'.

- The purity of data was thoroughly suspected by the professionals and the government representatives. However, there were little efforts to collect the data, which could be reliable and comparable across the regions that were under the control of the British Empire.
• There were efforts to generate some kind of records for the jails and the cantonments, which consisted of not more than 2 percent of the total population. Rest of the population probably did not count for the Empire as their listing was not done. No information is available that can be taken as a reference point for the morbidity of the general population.

• The transition from the indigenous to the western system of medicine was taking place simultaneously when there was an occurrence of the epidemics like cholera and plague. There were efforts, philanthropic or otherwise to combat such diseases. The debate concerning these diseases and related combative measures involved the medical, political and social spheres of society. However, it would be naïve to think that the entire social life or political spectrum or for that matter all medical men were involved in the process. The debate remained centred in the urban areas and the measures, especially the ones related to public health remained limited to urban centres.

• Tuberculosis, despite being epidemic in character did not attract the required attention in the public health debate or in the planning of combative measures. The cases were generally reported late. The cure was available only in the form of prevention and there was no cure for late detection.

• The evil travelled to the rural hinterland silently but severely and increasingly. The increasing movement of people from the rural areas to the urban centres for the new kinds of jobs and the enhancing communication of the rural hinterland with the urban centres played as a catalyst to the process. The desire of the sick to die at the birthplace also added to the ongoing spread.
The combative measures that started with the establishment of sanatoria, too, facilitated the spread of the disease, by exposing the virgin land and the virgin people to the bacillus. The opening up of sanatoria in the favourable climate and approving locations brought the diseased to the so called favourable location for the treatment.

The correspondence between the professionals and political circles showed that the ideas of exposure or the threat to infection was already there. At the time of opening of the first sanatorium at Dharampore, the medical officer of the area suggested that the institution should not be brought here, as the diseased people coming here for the treatment would become the cause of the infection to the innocent people living here.

The suggested measures to combat tuberculosis included education about tuberculosis, defining working space for the factory workers (The Factory Act, 1894), checks on overcrowdings, clearing of the houses on dead end of the streets, checking indiscriminate spitting and seclusion of infected children from school and infected person in the army and prisons.

These responsibilities, however, were passed on from one authority to another, like clearing of houses, and complying building by-laws were left to local bodies. In some of the cases, doctors were told to notify the disease. But, when they asked from the state to hand over to them the sanitary powers for fruitful implementation of their proposals, it was not done. These measures, whether taken or suggested, were targeted efforts to control the spread of the bacillus and make people safe by restricting the exposure.
• The contrasting position of professionals regarding the incidence of the disease in different parts of the country is noticed. The general view among the professionals and the available evidence do suggest that there was an increase in the number of infected people across the country. The increase in the incidence was reported in India at a time when Europe had already witnessed a decline in the rate of infection and also in total infected cases. A similar trend was noticed in America. The fall in the phthisis was achieved much before tuberculin bacillus was discovered.

• In India the cases of tuberculosis were on the rise as there were neither any serious public health efforts nor the economic condition of the mass was getting better inspite of surplus of revenue collected from agriculture in some of the years. The economic history of the late nineteenth century of the country suggests that there was a decline in the real income of the people and price of food-grains was escalating. The average income in real sense was going down. Report on an enquiry into working class of Bombay by Bombay Labour Office in 1923 highlighted that daily food-grain consumption of a common worker was lower than the level of food-grain consumption in the jails or even the consumption of cereals during famine.

• The analysis on the deaths by tuberculosis clearly shows that the data on mortality from tuberculosis during colonial as well as during post-colonial period has several discrepancies. There is an increasing trend in registered deaths while for reported deaths there is a downward trend.

• The analysis of the secondary data clearly shows that living conditions along with the physical settings of the area are directly related to morbidity. Pronounced differences have been found in the level and pattern of morbidity
from tuberculosis among the different states and different ecological regions. The North-eastern states and the BIMAROU (Bihar, Madhya Pradesh, Rajasthan, Orissa and Uttar Pradesh) states have a higher incidence of the disease.

- Among the ecological regions, the wet regions have a higher incidence of the disease and dry regions like western Rajasthan and western Plateau have a lower incidence. Within the ecological regions, areas with poor agricultural productivity have higher incidence. Similarly within the states, regions having wet climate a have higher incidence than the dry regions of the same state.

- Standard of living (SLI) of the people is one of the determining factors for the prevalence of the disease. In the urban areas the impact of SLI is more compared to the rural areas. In the urban areas, occupation and personal habits like smoking are other important factors which keep the incidence high. Education, religion and caste are determining factors for the prevalence of the disease in rural areas.

- The impact of education on treatment seeking behaviour is more significant in some of the regions than even the SLI. In the rural areas more educated people have gone to the treatment irrespective of their SLI. The role of caste is also seen as important in determining the treatment seeking behaviour of the people.

- Tuberculosis is a major public health problem in India and the Government has taken both preventive and curative measures right from the First Five Year Plan after Independence. This includes implementation of the National Tuberculosis Control Programme (NTPC) and the Revised Strategy for
National Tuberculosis Control Programme (RNTCP) with DOTS. Unfortunately, the objective of DOTS has been to achieve a higher cure rate. The relapse of the disease in cured patients questions the so-called 'anti-biotic revolution'.

- Although, the Government promised to provide health services free of cost, the policy could not be implemented in reality and after the 1990's it was discontinued. The Eighth and Ninth Plans show a large variation in the investment and expenditure pattern within the health sector. There was a shift from investment in health to family planning. Due to the absence of the National Health Accounting System, there is no information on total government expenditure on health and categories of people who benefit from this expenditure.

- The ongoing anti-tuberculosis campaign, i.e. the Revised National Tuberculosis Control Programme (RNTCP) is target driven. The target is primarily to achieve a higher cure rate. During the survey it was found that, in the eagerness to pursue the target, patients who are not likely to come to DOT centre, are not enrolled. It makes little sense to achieve a cure rate of 85 percent in some patients at the cost of leaving out many others. The study of New York City shows that only 40 percent of the patients, especially those who are probable non-compliant, receive the treatment under DOT. On the contrary, in Delhi, a patient is called for chemotherapy only if he/she is thought likely to be compliant.

- The world is talking about 'eventual eradication' as the goal of anti-tuberculosis campaign. However, the fact remains that the menace of

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tuberculosis is far from being eliminated especially in the poorer sections of the society where the resurgence of the disease is frequent. Directly Observed Therapy (DOT) is widely held as the standard treatment protocol for active tuberculosis and is believed to be the most effective method for guaranteeing medication, treatment adherence and compliance resulting in an effective cure.

- There is an increasing trend in the percentage of deaths among the reported cases of tuberculosis. Delhi, despite having better health facilities and being the first state to achieve full coverage under the DOTS programme shows more deaths among the reported cases than other parts of the country. This means that if the statistics are to be believed then enhancing health infrastructure results in the increasing mortality and morbidity. From this analysis, non-reliability of mortality data in India is again established.

- The result of the primary survey reflects that tuberculosis in India is more than a disease. Stigmatisation of tuberculosis patients is a common phenomenon even in metro cities like Delhi.

- The proportion of male patients is more in South Delhi, because this is the zone where there are new migrants, who come to the cities alone. Whereas, the proportion of female patients is more in the western, northern and central parts of Delhi. In general only 37 percent of the patients are female and this is because of the male selective migration to Delhi. The elderly population is comparatively higher (22.5 per cent) in the Karolbagh region, while proportion of children is more in South Delhi (17.5 percent).

- Social and economic conditions of the people are found as the determining factors in the occurrence of tuberculosis. The high proportion of scheduled caste population affected by the disease indicates this. About 26 percent of the
patients belong to the scheduled caste category, while 43 percent of them are from other backward classes. Most of them belong to low SLI group.

- Majority of the patients were from low SLI group (72 percent) while only 5 percent of the patients belonged to the high SLI. The proportion of patients in the working age-group was about 80 percent except in South Delhi, where the proportion of the working population amongst patients was 70 percent.

- Migration is an important factor in deciding the health of the population. Out of the sample, 59 percent are migrant of which 46 percent are old migrants who have been living in Delhi for more than 5 years. It is noticed that the Central region has a higher concentration of old migrants (66.5 percent) followed by West Delhi (50 percent). A higher proportion of Muslims in central region is because of concentration of old migrants. Among the surveyed patients from the different zones of Delhi, nearly 75 percent are Hindus, except in the central region where Muslims are dominating the sample (58 percent).

- It is not merely the level of literacy; but education that affects the occurrence of the disease and the treatment seeking behaviour of an individual. Among the surveyed patients only 16 percent were illiterate and 75 percent has spent less than 10 years in school. Only 9 percent of the patients had spent more than 10 years in the school. It is found that patients with more years in school are the one who directly have gone to the tuberculosis centres / hospitals.

- The economic condition, availability of employment opportunities and familial responsibilities affect the treatment seeking behaviour of the patients. The poor economic conditions, social and familial responsibilities in the villages turn the migrants as defaulters in the treatment process.
• The result shows that 30 percent of the reported deaths from the patient's family were from tuberculosis. When this is considered for the entire sample, it was found that in the families of about 10 percent of the surveyed patients deaths had occurred from tuberculosis.

• Tuberculosis is an infectious disease and if a member of family is infected, others become more vulnerable to the bacillus. About 24 percent of the patients reported that some other member(s) of their family had suffered from tuberculosis at some point of time. In 33 percent cases parents were found to be infected after their wards were suffering from the disease and about 16 percent of children got infected when their parents were suffering from the disease.

• The patients, who have unusual symptoms, are somewhat fortunate as they directly go to the big hospitals or to tuberculosis centres. They are saved from the possible severity of the disease and also spend less money on treatment.

• The patients reported that they changed doctors because of two main reasons a) when they are not getting relief from the symptoms; and b) when they are not cured completely. However, there are other reasons to change the healers like familial responsibilities at the native place, high cost of treatment in the private sector, and insincere treatment at public hospitals.

• Illness from tuberculosis poses a significant threat to self-esteem of patients and threatens the individual's social status and their inter-personal relationships. The perceptive change among the tuberculosis patients in India are of two kinds; a) change in the perception about self, and b) change in the perception about society.
• The change in the perception about self is related to the a) loss of personal control; and b) threat to self-esteem. The contextual change is also related to the changes in the perception about self. Generally self-perception has a bearing on contextual perception, which shapes the individual’s feeling of loss of control or loss of self-esteem. The negative change in perception of patients is also due to the poor condition of the chest clinics.

The disparities between the levels of health-care facilities for communicable diseases like tuberculosis and non-communicable diseases are increasing. The fact that incidence of communicable disease is more amongst the poor, while rich gets affected more by non-communicable diseases makes it imperative that more money is diverted for the non-communicable diseases. The larger mass of people is affected by tuberculosis but intense attention is towards the non-communicable disease that requires more money. However, the power-group within the state machinery and in the professional circles tries to mobilise more funds for researches related to non-communicable diseases. This results in continuous and systematic decline in the funds available for the treatment of communicable diseases like tuberculosis.