CONCLUSION
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Public health is the science and art of preventing the disease, prolonging the life span and promoting health and efficiency through organized community effort. This includes sanitation of the environment, control of communicable disease, the education of the masses in personal hygiene, organizing medical and other auxiliary services for early diagnosis and preventive treatment of diseases and finally to develop a social machinery which will help in ensuring every individual a standard of living adequate for the maintenance of health.

It is clear from All India Census Committee's report for 1951 that the population of India is steadily increasing from 240 millions in 1921, 360 millions in 1951 and now to 439 millions in 1961. The present position of India is that the population is higher than the total population of the U.S.A. and Russia put together. Due to vast population and the low socioeconomic condition of our country, environmental sanitation is still beyond our reach. As a result of this morbidity and mortality figures of India from communicable diseases are very high.

A high morbidity rate due to malaria which was responsible for between 25 to 75 million cases of illness every year has been considerably reduced and the high death rate has been brought almost to negligible. It is also noted that there are 2.5 million active cases of tuberculosis in India a million suffers
from leprosy. Now trachoma the preventable eye disease is found to be highly prevalent in the North and North Western states of rural India. Trachoma is a world wide problem and it is a major public health problem in rural India. No reliable data is available regarding the number of total trachoma cases in the world. But it has been estimated by workers in the field that the trachoma victims form 15% of the entire population of the world. Considering the population of the world as approximately 3300 million and basing on the above percentage nearly 495 million are suffering from trachoma throughout the world. The topographical survey on trachoma conducted by the Indian Council of Medical Research through Trachoma Control Pilot Project - India has revealed that in the rural population of India approximately 122 million persons are suffering from active or healed stages of the disease. This forms 27.3% of world trachoma suffers which is an underestimate as the survey restricts itself to rural area and population. In addition it has also been observed that the North and North Western States of India are highly trachoma endemic.

Blindness figures for India also reveal that one fifth of the world total blind population is present in India, which is much higher compared to its population. It has been estimated that India nearly accounts for 3.53 million economic blind, that too only in rural population of the fifteen states and nearly 20.6 million have impaired vision. Trachoma forms one of the major causes responsible for many blind in the country. Next to cataract, trachoma alone contributes towards 17.5% of blind in rural India.
Various epidemiological and treatment trials were conducted by the Trachoma Control Pilot Project and it is now taking steps towards a National Trachoma Control Programme covering in the first phase the states with high total trachoma prevalence.

Researches so far conducted in the field of trachoma have revealed some valuable guidelines for prevention and cure of the disease. Fortunately for us today we have the broad spectrum antibiotics which has come to our rescue. Children who form the main reservoir of infection and adults suffering from trachoma and associated infections can easily be treated by the local application of antibiotics intermittently, covering the peak periods of conjunctivitis. Thus the treatment of Trachoma on the part of the people has been reduced to the buying of broad spectrum antibiotics ophthalmic ointment by them and learning its correct application in the eyes as also the healthy practices for the eye care. Health today has become a purchasable commodity. The ability to prevent illness, to control it and to treat it in large measure depend on the purchasing capacity of the individual in the community. Want of environment conducive to healthful living, general insanitary conditions and above all want of both curative and preventive medical help have become the outcome of poverty.

Under these conditions it is natural that poverty, ignorance and disease will form a vicious circle and economic measures though noted directly concerned with medicine are essential before any real progress can be made.

In order to make the people understand the cause, prevention and cure first of all we should educate them on scientific lines so that their ignorance of the disease is
removed. When once this is done it will become easier to push through various methods and medias that are developed to control the disease. This is obtained by giving the people proper health education.

Preliminary to this is the correct knowledge and understanding of the disease itself. Scientifically planned cross sectional and logitudinal surveys should be conducted to know the prevalence of the disease and the factors affecting it. In the present communication a detailed study has been made on the statistical aspects of prevalence of trachoma in Rural India. Though the study has been done in detail one can never say about the completeness of the study. There are still many gaps which are to be filled to make the study more exact and nearer to completion. The extension of the present one can be in the form of a semi-longitudial one, the results of which may answer mostly if not wholly all the possible questions posed by epidemiologists and Trachomatologists. For example statistical studies on the age of onset and duration of the disease in several stages and prolonged period requires further consideration as trachoma is a self healing disease.

Secondly the intensity and gravity of the disease trachoma in high, medium and low endemic areas will have to be studied carefully and over a period of time. As has been mentioned in the chapter on 'Index on gravity of trachoma' in the areas of variable endemicity, it may be possible that intensity be high and gravity be low and vice versa. Hence a suitable combination of intensity and gravity of trachoma in different areas will have to be agreed upon before any action on the
launching of mass drive towards the treatment of trachoma is undertaken. If the world wide trachoma index is not possible, then the index on regional basis based on the type and intensity of trachoma found may be an answer. With these limitations, there are ample scope for research in trachoma as regards the intensity and gravity of the disease are concerned. However the present thesis is a partial fulfilment towards the statistical studies on prevalence of trachoma in general and prevalence of trachoma in rural India in particular.

Health Economics forms an important aspect in any public health programme. The efficiency, practicability and feasibility of any control programme planning depends also on how much money a country can afford to spend on a particular programme. However the public health importance of the disease in question cannot be over looked.

India is mostly an agricultural country in which 80% of the people live in Rural areas. Many public health activities are going on side by side to improve the general health conditions which has reduced the death, debility and disease from different diseases. These various health programmes have not only reduced the death rate but at the same time have increased the population by 1 to 2% a year. The real price of health programmes often include not only expenditures for public health programmes but also costs which are occasioned.

Trachoma is highly endemic in the North and North Western parts of the country. Particularly among children below 10 years of age this forms a major public health problem. As
mentioned in the epidemiology of the disease by repeated attacks of infections one goes in the long run into complication. A fraction of these complications may go into corneal opacity and ultimately it may lead to total or partial blindness.

As a part of the control measure, the Govt. of India with the assistance of World Health Organisation and UNICEF is making attempts to give blanket treatment to all children below 10 years and to adults who are suffering from the disease. Though the blanket method of treatment may not be solution to the problem of trachoma in the long run but as a short term measure it is expected that this will control the disease. Under the above circumstances any public health administrator has to pose himself the following questions and find a solution for them.

1. What is the cost of the disease?
2. What should be the comparative amounts that is to be spent for prevention and treatment?
3. What is the cost of the disease trachoma and the price of good sight?
4. What are the costs and prices of alternative health activities and the amount to be spent for the control of the disease compared to other public health programmes?
5. What the country can or cannot afford to spend in meeting this disease problem?
Under the present conditions the solution to the above questions depends on the comparative costs that are involved in prevention and in actual cure of the disease. The economic cost arise out of trachoma and its complications on economic resources which can be studied under the following heads:

(A) **USE OF ECONOMIC RESOURCES**:

The cost that is involved for man power and materials i.e. for prevention, diagnosis, treatment and rehabilitation of persons. This part of the cost function comprises of the actual expenditure both public and private for this health programme.

(B) **TRANSFER OF ECONOMIC RESOURCES**:

Resource transfer or of income arising out of mitigating the burden of sickness.

(C) **LOSS OF ECONOMIC RESOURCES**:

Cost i.e. involved from the human resources lost or impaired as a result of blindness, disability and debility caused by the disease trachoma.

The use of the available resources for prevention, diagnosis, treatment and rehabilitation depends on the resource loss caused by the disease itself. What is the extent of damage caused by the disease and how much importance in priority should be given to this disease compared to other Public Health Programmes are the basic things with which one has to start planning for the available resources.
The loss caused by the disease trachoma may be a short one (one year) or of a longer duration, resulting in moderate impairment of vision and ultimately leading to economic blindness. In a given time period of say one year we have to take into consideration the prevalence of the disease trachoma and also its incidence. Since the duration of the disease is a difficult one to decide, for the disease trachoma the incidence and prevalence at a time period will have to be decided. This will be useful in calculating the loss caused by trachoma. The disability caused by this disease may be partial or total. In the early stages of the disease and during childhood this disease causes disability and hinders the educational progress. In the advanced stages after repeated attacks and complications of the disease, the effect may be total or partial blindness. In this way this disease affects children the future productive age groups and the present adults i.e. mostly productive workers. The age limit as for any disease within which persons who contract the disease will be considered as productive workers, be taken in rural India as fifteen years and the maximum age limit to which he can work as a productive worker may be considered as 55 years. Also one while working out the cost of prevention of the disease and the resource loss should take into consideration that not all persons of productive age are actually engaged in production.

Next comes the problem of rural women working at home and assisting in the field. The reduction in debility from trachoma in such cases in addition to the main productive worker may be an important factor in increasing the production.
Many a time there will be an equal weightage given to the economy and ethics involved of a disease. Sometimes a balance will have to be struck between these two taking into consideration the country's economy. Due to ethical and for other reasons, the National Government cannot allow the disease to continue in the community inspite it will have to go into the details of costs involved for prevention of the disease as against the treatment surgical or otherwise as the priority in health expenditure should be evolved by taking into consideration many administrative and financial aspects.

An estimate of cost of the trachoma disease prevention and/or treatment could be worked out by taking into consideration the available expenditure pattern by making use of one or more of the following relations.

In the primary health programmes on trachoma an estimate of expenditure may be obtained by knowing one or more of the following expenditure relations.

1) Allocation of overhead costs - costs of training health personnel and construction facilities to the disease category based on some index of relative importance like number and use of personnel and facilities.

2) Expenditure under public and private agencies programme specially meant for services, research or prevention of the disease category will provide the cost of resources.

3) Total expenditure in hospitals and nursing homes under the disease category.
(4) Average cost of treatment per case multiplied by the number of cases will give the total cost of the disease.

(5) Average duration of the disease multiplied by the number of cases times the time cost per unit service plus the average drug use times the cost of other health services will give the estimate of the expenditure on the disease.

Health of the community is an indicator of the standard of living. Good health is an investment in the economic resources of the country. It helps not only to increase the National product but also helps in the human welfare.

Sometimes public health programmes will have to be conducted on ethical grounds even when the return from the programme is zero or negative. To a health economist, the consideration of the cost of the disease, and the priority in preference to other health programmes does sound important. Under these conditions the economic implications of the disease cannot completely be ruled out. Hence the above attempt in deriving the cost function and trying to peep into the estimate of expenditure can fully be justified.

With the time available and limitations of the data an attempt has been made for the first time to study statistically the prevalence pattern of trachoma in rural India. I hope this study will give venues for further research and will make the public health workers aware of the study and magnitude of the problem so that it can be tackled most effectively.