Rural Health And Health Status of Tamilnadu with Special reference to Tirunelveli District

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Abstract—Good health is more important for all human beings. The health factor directly contributes the nation growth and productivity and human resource development in nationwide. The whole nation growth is based on the health and its infrastructure system. In India the health care system is administered by the concern state, controlled and governed by the central government. India has a hierarchy of strong health care system but there are differences in availability of resources and utilization between rural and urban areas as well as between public and private health care. In India the region wise, district wise and population wise a vast different. The availability of resources is not sufficient for the current situation. The necessity of health need is increasing day by day. The technological impact one side more over the innovation in equipment, medicine and methods are the challenging factors in the health system. Another critical factor like increasing population, climate changing, natural calamities affecting the enter health system net work in the country. The migrating population from village to developing city is a big challenge in the planning and executing the health plans. The Government is taking a crucial action for facing these challenges and achieving better health to the people. For this context Government of Tamil Nadu has engaged more resources on health and nutrition, strengthening health infrastructure to reach health to everyone. In the State Tamilnadu quandom of achievements has been made in last 10 years by reflecting health indicators shows birth, infant mortality rate and maternal mortality rate. The main objective of this study is to assess the performance of public healthcare sector in rural Tamil Nadu and a special reference to Tirunelveli District, to know the key health indicators and to know the health sector vision 2023 and to suggest ways and means to improve the public health sector.

Keywords—Primary Health Center, Health Indicator, Healthcare Sector, Health Status, Rural Health

I. INTRODUCTION

In India the concern state government undertake the health of people in wide range. Government Medical Colleges Hospitals, Government Hospitals, Primary Health Centre, Urban Health centers are playing major role in health system. Tirunelveli district divided into two health division is called Health Unit District (HUD) Tirunelveli HUD and Sankarankovil HUD. According to the health needs the health facilities are divided into Health Sub Centre (HSC), Primary Health Centre (PHC) and Urban Primary Health Centre (UPHC). Table 1 shows the profile of two districts.

<table>
<thead>
<tr>
<th>HUD</th>
<th>No. of Blocks</th>
<th>No. of HSC</th>
<th>No. of PHC</th>
<th>No. of UPHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tirunelveli</td>
<td>10</td>
<td>217</td>
<td>45</td>
<td>10</td>
</tr>
<tr>
<td>Sankarankovil</td>
<td>9</td>
<td>162</td>
<td>43</td>
<td>6</td>
</tr>
</tbody>
</table>

To maintain good health is a basic right for all human beings. Everyone should get the quality of health services and medicines as and when required. The health facilities should be available in near and prompt service is needed all the time. The service should be in free or affordablecost. Every year revised health plans and new schemes announced by the Government and it is available in the health providers. Everyone should know the schemes and utilize the service availability. All such health plans and schemes are introduced for maintaining good status of health of each and every individual.

A. Significance of the Study

Overall the health is protected, but everyone under risk for their own health. This statement is expressing the importance of rural public health. There are some gaps in the public health system. The study is help to find out the gaps and constraints in the field of public health. The solution gives the improvement in the system as well as in the awareness in the general public.

II. REVIEW OF LITERATURE

In a review on Rural Health System in India by Neelmani Jaysawal[6] the author explained the rural health is more important for the nation growth. The existing administrative system needs improvements. The administrative things involve the regulation and enforcement of plans in the public health. Same as develop the human resources like capacity building, strengthening the disease surveillance mechanism. Also needs to provide the monitoring and further policy decision making. Strong HR is very important in public health.

Ashok Vikhe Patil, K. V. Somasundara2 and R. C. Goyal2 [] explains that one slogan used for “health for all by 2000” but it remains a distance for everyone. The rural health as well as the urban health it need an alternate plans and methods for national level as well as local level. The author finds out the way to need a revision of
policies and procedures and promoting long-term plans for rural health. The change in plans and procedures at all levels is important for the improvement in rural health in India.

**Objectives**
The aim of the study is to find out the health system by health indicator analysis. The secondary data is analysis from the website and SRS data, also strengthening the health system for the future and give suggestions for the improvement.

**III. Rural Health System**
In India, the health infrastructure in rural areas has been developed as a three-tier system: the sub-center, primary health center, and community health center to meet the primary and secondary health needs.

The following elements are the most important components of rural overall health status.

A. **Maternity Health**
   - Care in maternity period
   - Care in during maternity
   - Care in after delivery
   - Care in infant
   - Care in economic for the family
   - Care in healthy nutrition

B. **Child Health**
   - Immunizations
   - Nutrition food and medicine

C. **Family Health**
   - Family planning facilities
   - Follow up and feedback for the family

**IV. Public Health Service in Rural**

Environmental Factors in Health: To maintain the house, street, parks, schools, water resources and public places clean and neat is the environmental health. The main component for the environmental health is

- Pure and clean drinking water
- Waste management
- Proper sanitation
- Adequate Nutrition

Pure and clean drinking water is the main element in the rural health system. To maintain periodically in the water tanks and proper chlorination in the drinking water. The waste management is to maintain the waste water outlet in all areas due to the improper maintenance, the misquote generated and it created the communicable diseases.

Nutrition problem is the major role in the rural health. Nutrition is the substance in the food to maintain the health, growth, reproduction, and resist from the disease.

A. **Social Threatening Problems**
Disease is the life threatening for the human being in all stages of life. From the beginning to the ending life cycle, the disease creates many problems and it is the indicator for the healthy society.

- Communicable disease (CD)
- Non Communicable disease (NCD)

The communicable disease (CD) is easily transferred from one person to another person through air, water, food, and personal touches. The CDs are mainly due to viruses, bacteria, and Germs.

The Non Communicable disease (NCD) is from person to person based on environmental, personal hygiene, and habituation, heredity in nature. Table 2 shows the list of communicable and non-communicable diseases. The Non communicable disease burden is measured in India 51%.
TABLE 2. LIST OF DISEASES IN CD & NCD

<table>
<thead>
<tr>
<th>Communicable disease (CD)</th>
<th>Non Communicable disease (NCD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold</td>
<td>Heart Attacks</td>
</tr>
<tr>
<td>Flu</td>
<td>High Blood Pressure</td>
</tr>
<tr>
<td>Chicken Pox</td>
<td>Stroke</td>
</tr>
<tr>
<td>H1N1</td>
<td>Cancer</td>
</tr>
<tr>
<td>HIV and AIDS</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Mono</td>
<td>Arthritis</td>
</tr>
<tr>
<td>Meningitis</td>
<td></td>
</tr>
<tr>
<td>Hepatitis</td>
<td></td>
</tr>
</tbody>
</table>

For the Communicable Diseases (CD) Government has various plan for the prevention and treatment. Medicine is providing for affected persons and prevention vaccination for the society at large. Formulating greater efforts to prevent and treat non communicable diseases and improve health care including better access to vital medicines. Governments will integrate policies to reduce non communicable diseases into health planning processes in the rural areas. Evaluating progress and needs at the rural level. Figure 1 shows the projected global deaths due to some selected diseases.

Fig. 1. Projected global deaths for selected (source WHO bulletin 2008)

B. Current Status of On-going Scheme:

National Rural Health Mission [NRHM] is being implemented through the Community medicine department of the Medical Colleges in the state by adopting one urban health post to take health services closer to the urban poor for the rural health. The CRRI posted in the urban and rural PHCs are taking care of the regular functions of urban health posts and the specialists posted on fixed days continue to provide services,

- Providing health care to all families and family members
- Strengthening OP services mainly maternal and child health
- Providing specialty services
- Providing laboratory services
- Services for non-communicable diseases (NCD)
- Providing emergency transport services
- IEC activities.

Mobile Medical Unit (MMU) for Rural un reached areas in Tamilnadu Health System has established MMUs in all districts and more concentration in the high risk and un reached areas. The Mobile outreach health team consists of one Medical officer, one staff nurse, one Auxiliary Nurse Mid wife, one lab technician for maintain the rural health in high risk areas (HRAs), hilly areas.

C. Hurdles in Rural health Development

World Health Organization (WHO) and the United Nations Children’s Fund (UNCF) involved for the water and sanitation programme. The major Demography, Health and Nutrition 70cause for child death in India is diarrhea and respiratory infections. With over 50% of population affecting in the open and 44% mothers disposing their children’s faces in the open, endangers the infants in the country by increasing the risk of microbial contamination (bacteria, viruses, and amoeba) of water and land. Children weakened by frequent diarrhea episodes are more vulnerable to malnutrition and opportunistic infections such as pneumonia. This also affects the school going children. Hence, providing sanitary toilet facilities is a must and is an indicator of development. This disease is CDs so it will created problem in the public.
V. HEALTH INDICATORS

The basic health indicator is Birth Rate (BR), Death Rate (DR), Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR). These indicators show the rural health status and condition for the society.

Infant Mortality Rate (IMR) is the key sensitive indicator of child health in a country. Figure 2 shows the IMR of Tamilnadu and Tirunelveli during 2007-2017. The current level of IMR is in Tamil Nadu 1000 live births as per the Sample Registration System Survey (2007-2017). The State ranks as the second lowest among the major states in the country.

Fig. 2. (Source SRS data – Fact sheet from http://www.rchiips.org/nfhs)

Maternal Mortality Ratio represents the most sensitive and key indicator of women’s health and their status in the society. The Government of Tamil Nadu desires to ensure that all women go through the pregnancy and its outcome with equity, respect, dignity and social justice through better access to quality maternity and child health services especially during pregnancy, child birth and post-partum period. Tamil Nadu has one of the very low MMR among the major Indian States. Figure 3.a. shows that during 2007-16, Tamil Nadu reported less Maternal deaths amounting to a MMR 1,00,00 live births.

a. Maternal Mortality Ratio (MMR) – Tamilnadu getting (As Per Sample Registration System Results)

Fig.3.b. Maternal Mortality Ratio (MMR) – for the district Tirunelveli down for the over period. (Source SRS data – Fact sheet from http://www.rchiips.org/nfhs)

Population size is calculated using the equation (1).

$$\text{Pop. Size} = (\text{Birth} + \text{Immigration}) - (\text{Death} + \text{Emigration}).$$

Crude Birth Rate is Births in 1,000 People per Year. It is calculated using equation (2)

$$\text{Birth (Crude) Rate} = \frac{\text{No of Births}}{\text{Total Population}} \times 1000$$

Crude Death Rate is Deaths in 1,000 People per Year. It is calculated using equation (3)

$$\text{Death (Crude) Rate} = \frac{\text{No of Deaths}}{\text{Total Population}} \times 1000$$

Figure 3.b. shows the MMR rate in Tirunelveli during the period 2007-2017. Birth Rate (BR) and Death Rate (DR) is a key factor for the health status in the rural.
**Table 3** shows the most affecting factors of birth rate and death rate.

<table>
<thead>
<tr>
<th>Factors Affecting Birth Rate</th>
<th>Factors Affecting Death Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Labor</td>
<td>Food supply &amp; distribution</td>
</tr>
<tr>
<td>Education &amp; employment (especially for woman)</td>
<td>of nutrition</td>
</tr>
<tr>
<td>Urbanization</td>
<td>Medical technology &amp;</td>
</tr>
<tr>
<td>Infant Mortality</td>
<td>health care/insurance</td>
</tr>
<tr>
<td>Average marriage age</td>
<td>Hygiene/sanitation</td>
</tr>
<tr>
<td></td>
<td>Access to clean water</td>
</tr>
</tbody>
</table>

The indicators in figure 4 and figure 5 show that in year 2007 – 2017 Birth Rate (BR) and Death Rate (DR) in Tamilnadu and Tirunelveli is maintained while comparing with other states and other district from the Tamilnadu.

**Fig4. Birth Rate**

**Fig 5. Death Rate**

### VI. Findings and Conclusion

The secondary data analyzed and find the Birth Rate (BR) is stable in past years. The Death Rate (DR) is over all in Tamilnadu 1.1% decreased in Tirunelveli the rate stable means no abnormal events happened. The result shows the Normal health status maintained in district.

IMR get down from 23.8 - 11.52 for the past year due to more concentration on Immunization and Nutrition program planned and held for the last five year. The Mission Indradanush (MI) it is more than 95% achievement done in overall district. Another Progrme MR Campaign (Measles Rubella) vaccination given to children and pregnant women more than 98% covered in total targeted population. Now a days The immunization strengthening by Routine Immunization (RI) by introducing new vaccine like Pentavalant, ROTA, MR & JE in some district. Enhanced health facilities help to maintain society good health status.

Tamil Nadu has started immunization programmes against vaccine preventable diseases like Diphtheria, Pertussis, Tetanus. For this implementation disease drastically reduced and controlled. Under Universal Immunization Programme, Government has a plan to immunize all infants and pregnant women in all the part of the state.

Overall the data and its results show the health status improved and maintained by good surveillance system and implementing various schemes.

### References

1. District Factsheet: Maternal and Child Health Indicator
3. An Analysis Of Trends In Selected Health Indicators By Districts Of Tamilnadu Dr.A.B.Angappapillai*; V.Sobana.
4. District Human Development Report 2017
5. District Census Handbook Tirunelveli
7. Current Health Scenario In Rural India Ashok Vikhe Patil,1 K. V. Somasundaram2 And R. C. Goyal2

Websites:
- http://phm-india.org
- http://wcd.nic.in/icds.htm
- http://indianmedicine.nic.in
- http://mohfw.nic.in