CHAPTER II

ANANTAPUR DISTRICT : PROFILE & HEALTH STATUS

- Location
- Demographic details
- Rainfall
- Economy
- Educational Infrastructure
- Health Care Infrastructure
- Health status
- Indicators
- Morbidity trends
ANANTAPUR DISTRICT : PROFILE & HEALTH STATUS

LOCATION: Anantapur district is one of the 21 districts of state of Andhra Pradesh in India. Culturally it belongs to Rayalaseema region of Andhra Pradesh. This region originally comprised five districts namely, Anantapur, Bellary, Chittor, Cuddapah and Kurnool and these were known as ceded districts. The district Anantapur was formed in the year 1882. Both Anantapur district and Rayalaseema region are prone for chronic drought and famine.

Anantapur district is situated in the south western part of Andhra Pradesh and is in between 13° 50' to 15° 10' N-latitude and 76° 55' to 78° 10' E-latitude. The district boarder the Karnataka state on the west and north east, Chittor district on the south and Kurnool district on the north.

The district is grouped into three revenue divisions and comprised 17 taluks. However, after 1981 the revenue taluks were reorganised and Revenue mandals were formed. Thus now the district comprises 63 revenue mandals. According to 1981 census there are 964 villages out of which 936 are inhabited and 28 uninhabited. The
district also comprises 2,421 hamlets. The number of towns that are present in the district are 11.

DEMOGRAPHIC DETAILS:

The total population of the district was 26.18 lakhs as per 1981 census. The rural population was 20.88 lakhs (80% of the total population). While the urban population was 5.30 lakhs (20% of the total population). The Scheduled Caste and Scheduled Tribes population form 13.32% and 3.13% of the total population in the district respectively. The backward castes constitute 31.64 per cent to the total population.

The density of population of the district is 133 per Sq.Kms. against 195 per Sq.Km for the state. The district takes second place in Rayalaseema region with reference to density of population. There were 946 females per 1,000 males in 1981 as against 947 per 1,000 in 1971 census.

The growth rate of population of Anantapur district for 2 census periods (1961-1981) is 19.7 per cent and 20.4 per cent respectively. It is lower than the Andhra Pradesh state average 23.19 per cent. The percentage of literates among males is 38.18 per cent as against 15.21 per cent among the females.
The working force in the total population of district forms 42.66 per cent as per 1981 census of which 32.40 per cent are in the agricultural sector and 10.4 per cent in the non-agricultural sector. The pattern of distribution of workers to the total population is almost similar in all other districts of Rayalaseema region. Non-workers form 57.75 per cent of the total population.

RAINFALL:

The location of the district in the middle of the peninsula makes it the driest part of the state, as a result of which the agricultural conditions are precautious and rainfall uncertain. The normal annual rainfall is 560.1 mm. Which is least when compared to all other districts of the state. It receives rain chiefly from South-West and North East monsoons, the normal fall during these seasons being 317.6 mm and 151.9 mm respectively.

It is a well known fact that Anantapur district is one of the most backward and drought prone areas of not only Andhra Pradesh but also of India. It is vulnerable to scarcity, droughts and famines. It lies in the heart of the famine zone with exceedingly scanty and precarious rainfall, impoverished soil condition and precarious irrigation sources.
ECONOMY :

AGRICULTURE :

The normal cultivated area of the district is 29.13 lakh acres, out of which 20.00 lakh acres is under kharif season and 2.13 lakhs area under Rabi seasons. Food crops form 62 per cent and non-food crops about 38 per cent. The various crops sown in the district are paddy, wheat, jowar, ragi, korra, millets, sugar-cane, cotton and sericulture. Groundnut alone accounts for 31 per cent of the total cropped area and 84 per cent of the total area under non-food crops.

EDUCATION INFRASTRUCTURE :

The district has the distinction of having two Universities besides an Oil and Technological Research Institute and a Dry Farm Agricultural Research Station. In addition, the district has 1 Engineering College, 2 Polytechnic Colleges, 13 Degree Colleges, 28 Junior Colleges, 10 Industrial Training Institutes, 258 High Schools and 876 Primary Schools.

HEALTH CARE INFRASTRUCTURE :

The health status of the people besides many other things also depends upon the health care delivery system and also the access to the health care infrastructure
Therefore to illustrate this an attempt is made to explain the health care delivery system in the district and access to the system with the help of number of doctors, paramedical staff, hospitals, dispensaries, clinics and number of beds available in the district.

The district enjoys 63 primary health centres, it means every revenue mandal in the district has been provided with a primary health centre, in addition to the primary health centres there are as many as seven government dispensaries distributed along the district to cater to the needs of the people. Further, the major urban centres are provided with government hospitals and they number 16. The 16 hospitals include one exclusively meant for communicable diseases and one for police personnel.

The number of beds available are 1,205 and it works out to be 38 beds per lakh population. Similarly, 212 government doctors are pressed into service, to look after the medical needs of the people. Thus, 8 doctors are available per lakh population. In addition to the above as per the new health policy one male and female para-medical staff are provided for every 5,000 population. Similarly for every one thousand population one community health worker is also provided to cater to the health needs of the people.
Thus, infrastructure wise Anantapur district enjoys relatively better health status than many other parts in India.

HEALTH STATUS:

The nature of health status in a given population is best understood with the help of such indicators as birth and death rates. Infant mortality rate, and maternal mortality rates and morbidity trends. The mortality rate of the rural population in India as per the report from UNICEF, is on an average twice as high as that of the urban population and the infant mortality rate in rural India is around 140 per 1,000 live births, accounting for about 30 per cent of all deaths. Diseases due to non-immunisation such as tuberculosis, whooping, cough, diphtheria, measles, polio etc., constitute only 35 per cent of all diseases but account for almost 24 per cent of all deaths. This is one of the causes of the very high infant mortality rate. Similarly, while the diseases of pregnancy, child births and early infancy constitute 4 per cent of all diseases, they account for almost 14 per cent of all deaths. The victims there are again infants and women.

The health status of the population in Anantapur district is presented in the Table-1. As per the data
TABLE 1

HEALTH STATUS OF THE POPULATION IN ANANTAPUR DISTRICT

<table>
<thead>
<tr>
<th>Year</th>
<th>Birth rate</th>
<th>Death rate</th>
<th>Infant Mortality Rate</th>
<th>Maternal Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>16.29</td>
<td>5.48</td>
<td>23.61</td>
<td>3.70</td>
</tr>
<tr>
<td>1982</td>
<td>15.34</td>
<td>4.49</td>
<td>21.28</td>
<td>3.17</td>
</tr>
<tr>
<td>1983</td>
<td>15.04</td>
<td>4.44</td>
<td>22.40</td>
<td>3.02</td>
</tr>
<tr>
<td>1984</td>
<td>17.30</td>
<td>5.26</td>
<td>23.14</td>
<td>2.28</td>
</tr>
<tr>
<td>1985</td>
<td>18.06</td>
<td>5.19</td>
<td>18.70</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Source: Records of District Medical & Health Officer, Anantapur.
from District Medical and Health Office the birth rate was increased. It ranges from 16.29 to 18.06 over the period of 5 years. Similarly, the death rate is also increased. But the infant mortality rate and the maternal mortality rate were significantly brought down.

MORBIDITY TRENDS IN ANANTAPUR DISTRICT:

Most of the diseases are caused by malnutrition and infection - water born, air borne and nector borne. The basis for this high morbidity is inadequate preventive approach and neglect of environmental hygiene in which the community has a basic role to play.

According to the report of UNICEF about half of the world's 20 million Tuberculosis patients are Indian and over one-third of the 10 million leprocy patients in the world are Indians. Water borne diseases, Cholera, Typhoid, Gastro-enteritis affect imnumerable millions, killing atleast 1.5 million people every year. Of the 9 million blind persons in the country, about 5 million are curable. In addition 45 million persons are reported to be otherwise visually impaired. 25,000 children go blind every year owing to vitamine A deficiency and 3 million children suffer from other forms of this deficiency - night blindness, dry eyes rough skin etc. Diseases due to non-immunisation such as tuberculosis,
whooping cough, Diptheria, measles, polio etc. Constitute only 3.5 per cent of all diseases but account for almost 24 per cent of all deaths. This is one of the causes of the very high infant mortality rate. This is the overall health scene in India. Hence, the morbidity trends in Ababtapur district is presented in the following pages.

To understand the health status more clearly data related to morbidity trends for a period of five years was collected from the records of District Medical and Health Office, Anantapur. For the purpose of clear understanding and analysis various diseases were broadly categorised into ten categories.

1. Infectious and Parasitic diseases;
2. Neoplasms;
3. Endocrine, Nutritional and Metabolic diseases and immunity disorders;
4. Diseases of Blood and Blood forming organs;
5. Mental diseases;
6. Diseases of the nervous and circulatory system;
7. Diseases of the Respiratory system;
8. Diseases of the digestive and urinary system;
9. Complications of Pregnancy; and
10. Injury/poisoning & other diseases.
The secondary data collected pertains to the number of patients treated (both out & in-patients) in Government sponsored health centres, hospitals & dispensaries and the number of deaths occurred by the disease category.

Our analysis reveals that more than 40 per cent of the district population availed health care facilities and were provided medical attention for one or more ailments every year. However, it may be mentioned here that there is every possibility that the same individual might have availed medical care more than once in a year and thus the swelling of numbers. At the same time it may be stressed here that the data represents the patients treated in Government clinics only and a good percentage must have sought medi-care from other agencies too. In other words in Anantapur district more than 50 per cent of the population is subjected to health disorders every year which indicates the poor health status of the population.

The analysis of the Morbidity differentials by year and disease category is presented in Table-2. Our data shows that the larger percentage of population is affected by two disease categories.

During the period, between 1983 to 1987 on an
## TABLE 2
MORBIDITY DIFFERENTIALS IN ANANTAPUR DISTRICT

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the disease</th>
<th>Percentage distribution of patients treated by year</th>
<th>Average</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Infections &amp; Parasitic diseases</td>
<td>19.73</td>
<td>20.15</td>
<td>23.95</td>
</tr>
<tr>
<td>2.</td>
<td>Neoplasms</td>
<td>0.97</td>
<td>1.42</td>
<td>1.09</td>
</tr>
<tr>
<td>3.</td>
<td>Endocrine, nutritional and metabolic diseases &amp; immunity disorders</td>
<td>7.69</td>
<td>8.96</td>
<td>6.81</td>
</tr>
<tr>
<td>4.</td>
<td>Diseases of blood &amp; blood forming organs</td>
<td>11.32</td>
<td>12.43</td>
<td>11.21</td>
</tr>
<tr>
<td>5.</td>
<td>Mental diseases</td>
<td>0.05</td>
<td>0.06</td>
<td>0.13</td>
</tr>
<tr>
<td>6.</td>
<td>Diseases of the nervous &amp; circulatory system</td>
<td>7.65</td>
<td>13.72</td>
<td>10.41</td>
</tr>
<tr>
<td>9.</td>
<td>Complications of pregnancy</td>
<td>1.89</td>
<td>1.59</td>
<td>1.67</td>
</tr>
<tr>
<td>10.</td>
<td>Injury/poisoning &amp; others</td>
<td>15.10</td>
<td>16.14</td>
<td>16.56</td>
</tr>
<tr>
<td><strong>Total No. of patients treated</strong></td>
<td><strong>12,15,999</strong></td>
<td><strong>10,91,997</strong></td>
<td><strong>12,35,369</strong></td>
<td><strong>13,19,404</strong></td>
</tr>
<tr>
<td>% to the total Dt. Population</td>
<td><strong>47.72</strong></td>
<td><strong>42.86</strong></td>
<td><strong>48.48</strong></td>
<td><strong>51.78</strong></td>
</tr>
</tbody>
</table>

Source: District Medical & Health Office records, Anantapur.
average 22.45 and 22.30 per cent of patients were affected by infection & parasitic diseases and diseases of the Respiratory system respectively. Likewise diseases of blood and blood forming organs and Nervous and Circulatory system account for 10.62 and 10.49 per cent of patients respectively on average every year during the period under reference.

While it is heartening to note that the incidence of complications during pregnancy showed a downward trend, it was annoying to observe the incidence of occurrence has increased in several other categories. Particularly, attention may be drawn to diseases of the Respiratory system and infection and parasitic diseases. A further analysis of these two disease categories is presented in Tables 3 & 4.

Table-3 reveals that among the patients affected by the infections and parasitic diseases, more than 50 per cent were affected by intestinal infections every year. Late effects of infections and parasitic diseases also account for more than 12 per cent every year. Alarming rise was also noticed in respect of veneral diseases followed by Tuberculosis.

Table-4 shows that diseases of the upper respiratory tract like acute pensilitis, chronic diseases of Tonsils account for 30 to 40 per cent of patients every
### TABLE 3

**MORBIDITY DIFFERENTIALS IN INFECTION & PARASITIC DISEASES**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Infections &amp; parasitic diseases</th>
<th>Yearwise percentage distribution of patients</th>
<th>Average</th>
<th>SD+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intestinal infections &amp; diseases</td>
<td>57.78</td>
<td>52.29</td>
<td>60.14</td>
</tr>
<tr>
<td>2</td>
<td>Tuberculosis</td>
<td>3.22</td>
<td>6.44</td>
<td>4.94</td>
</tr>
<tr>
<td>3</td>
<td>Other bacterial diseases</td>
<td>11.93</td>
<td>7.04</td>
<td>5.51</td>
</tr>
<tr>
<td>4</td>
<td>Viral diseases</td>
<td>4.33</td>
<td>4.53</td>
<td>5.19</td>
</tr>
<tr>
<td>5</td>
<td>Ricketiosis and other arthropod borne diseases</td>
<td>4.83</td>
<td>5.39</td>
<td>1.73</td>
</tr>
<tr>
<td>6</td>
<td>Veneral diseases</td>
<td>5.00</td>
<td>5.79</td>
<td>5.94</td>
</tr>
<tr>
<td>7</td>
<td>Other infections and parasitic diseases and late effects of infections and parasitic diseases</td>
<td>12.90</td>
<td>18.52</td>
<td>16.54</td>
</tr>
<tr>
<td>Total No. of patients treated</td>
<td>2,39,893</td>
<td>2,20,088</td>
<td>2,95,933</td>
<td>3,03,590</td>
</tr>
</tbody>
</table>

Source: Records of the District Medical & Health Office, Anantapur.
### TABLE 4

MORBIDITY DIFFERENTIALS IN DISEASES OF RESPIRATORY SYSTEM

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Diseases of the respiratory system</th>
<th>Percentage distribution of patients treated</th>
<th>Average</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diseases of the upper respiratory tract</td>
<td>41.20</td>
<td>15.29</td>
<td>41.50</td>
</tr>
<tr>
<td>2</td>
<td>Other diseases of the respiratory system</td>
<td>58.79</td>
<td>84.70</td>
<td>58.49</td>
</tr>
</tbody>
</table>

Total Number of patients treated: 3,49,853 1,75,406 2,43,106 2,92,843 4,52,210

Source: Records of District Medical & Health Office, Anantapur.
year. But greater percentage of people are affected by such respiratory diseases as Bronchitis, Plurasy, Pneumonia, Influenza. Among those affected by respiratory diseases more than 50 per cent were affected by these diseases every year.

The fatality of each disease category is examined in Table-5. During the period under reference, as our analysis shows, every year highest percentage of deaths occurred in the category of Infection and Parasitic diseases and followed by deaths due to complications in pregnancy category and diseases of Nervous and Circulatory system, these categories on an average recorded 41.9, 12.69 and 11.58 per cent of deaths respectively among the total death recorded during the period between 1983 to 1987.

To sum up, the above analysis indicates that the Anantapur population is more vulnerable in terms of its health status. It shows the poor health care efforts both on part of the people and Government on one hand and on the other the effects of lack of socio-economic development and climatic and ecological factors. Higher incidence of deaths and occurrences in infection and parasitic diseases category indicate scant concern for health care and lack of socio-economic development and same is reflected in the case of deaths due to complications in
## TABLE 5
DEATH BY DISEASE CATEGORY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Infections &amp; Parasitic diseases</td>
<td>72.92</td>
<td>28.26</td>
<td>35.49</td>
<td>39.35</td>
<td>33.48</td>
<td>41.90</td>
</tr>
<tr>
<td>2.</td>
<td>Neoplasms</td>
<td>1.19</td>
<td>0.22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.70</td>
</tr>
<tr>
<td>3.</td>
<td>Endocrine, nutritional and metabolic diseases &amp; immunity disorders</td>
<td>0.24</td>
<td>2.83</td>
<td>0.48</td>
<td>0.54</td>
<td>3.57</td>
<td>1.53</td>
</tr>
<tr>
<td>4.</td>
<td>Diseases of blood &amp; blood forming organs</td>
<td>2.61</td>
<td>1.52</td>
<td>2.64</td>
<td>5.12</td>
<td>3.79</td>
<td>3.14</td>
</tr>
<tr>
<td>5.</td>
<td>Mental diseases</td>
<td>-</td>
<td>-</td>
<td>0.24</td>
<td>-</td>
<td>-</td>
<td>0.24</td>
</tr>
<tr>
<td>7.</td>
<td>Diseases of the respiratory system</td>
<td>4.75</td>
<td>10.87</td>
<td>6.71</td>
<td>8.08</td>
<td>5.80</td>
<td>7.24</td>
</tr>
<tr>
<td>8.</td>
<td>Diseases of the digestive system &amp; urinary system</td>
<td>4.16</td>
<td>3.69</td>
<td>5.75</td>
<td>9.43</td>
<td>2.01</td>
<td>5.01</td>
</tr>
<tr>
<td></td>
<td><strong>Total No. of deaths</strong></td>
<td>842</td>
<td>460</td>
<td>417</td>
<td>371</td>
<td>448</td>
<td></td>
</tr>
</tbody>
</table>

Source: Records of the District Medical & Health Office, Anantapur.
pregnancy. The climate and ecological factors in addition to the poor socio-economic development of the district are responsible for the higher incidence of diseases in Respiratory system. The chronic drought proneness of the region, and the resultant poverty have thus made the people callous about their health care and in turn resulted in the poor quality of human resource.
CENSUS OF INDIA

District Census Hand book - Anantapur District - Parts XIII-A & B
Series - 2
Andhra Pradesh
Director of Census Operations
Government of Andhra Pradesh.

DISTRICT MEDICAL & HEALTH OFFICE