CHAPTER VII

ENVIRONMENTAL CONDITIONS, AWARENESS AND ADOPTION OF THE RESPONDENTS
The health status of an individual, a community or a nation is determined by the interplay and integration of two ecological universes. The internal environment of man himself and the external environment which surrounded him. In the modern concept, disease is due to disturbance in the delicate balance between man and his environment. Of the three ecological factors (agent, host and environment), environment is responsible for disease, the disease agent is usually identified with the help of the laboratory. The host is available for study, but the environment from which patient comes is largely unknown. Yet, frequently, the key to the nature, occurrence, prevention and control of diseases lies in the environment. Without this knowledge, the key may not be available to the physician who desires to cure disease, prevent or control it.

The dictionary meaning of the word 'sanitation' is the science of safeguarding health. One of the best definitions is that which is given by the National Sanitation Foundation of the USA which runs as follows: "Sanitation is a way of life. It is the quality of living that is expressed in the clean home, the clean form, the clean business, the clean neighbourhood and the clean community. Being a way of life it must come from within
the people, it is nourished by knowledge and grows as an obligation and an ideal in human relations. The WHO defines environmental sanitation as "the control of all those factors in man's physical environment which exercise or may exercise a deleterious effect on his physical development, health and survival."

In the past, sanitation was centred on the sanitary disposal of human excreta. Even now, to many people, sanitation still means the construction of latrines. In actual fact, the term 'sanitation' covers the whole field of controlling the environment with a view to prevent disease and promote health. Man has already controlled a number of factors in his environment e.g., food, water, housing, clothing, sanitation and the standard of living. It is the control of these factors that has been responsible for considerable improvement in the health of the people during the past century in the developed countries.

The attainment of a health environment is becoming more and more complex. The term environmental sanitation is now being replaced by environmental health. Proper environmental health now requires the services of the public health qualified doctor, the epidemiologist, the public health engineer, the town planner, the sociologist, the economist the geographer and the health inspector. A combined multi-disciplinary programme of action is needed to achieve a healthy environment (Park and Park 1983).

India is still lagging far behind many countries in the field of environmental health. The basic problems of safe-water
supply and similarly disposal of human excreta are yet to be solved. Much of the illhealth in the country is due to defective environment. Since more than 80 per cent of the population of India live in rural areas, the problem is one of rural sanitation. The first step in any health programme is the elimination through environmental control of those factors which are harmful to health. The environmental factors which are basic and fundamental to individual and community health are water, air, ventilation, lighting, housing, sewage etc.

Based on the above introduction for environmental quality and health of the people, stress is given to find environmental quality in Anantapur district, like water, air, sanitation and housing. In addition, to get clear idea about the health conditions of the individual respondents the factors like habits of smoking, drinking, betal chewing and personal hygiene have been analysed.

HABITS:

Individual habits like smoking, drinking, betal chewing play very important role in the health of an individual. These habits are injurious to health. So, these factors have been considered to find out the health conditions of the respondents.

SMOKING:

About 18.20 per cent of the respondents has the habit of smoking. In this, about 62 per cent of them have the habit of smoking beedies, remaining (38%) are addicted to the habit of smoking cigarettes or cigars.
DRINKING:

From the study, it has been found that about 9.20 per cent of respondents have the habit of drinking arrack, toddy and other liquors. But after the introduction of complete prohibition in 1995 in Andhra Pradesh, there is a change in the consumption of liquors.

BETAL CHEWING:

About 8.7 per cent of the respondents are having the habit of betal chewing.

Among the habits like smoking, drinking and betal chewing, it may be stated that smoking is high, followed by the consumption of liquor and betel chewing. However, the proportion is high in the case of smoking which is injurious to health.

PERSONAL HYGIENE:

The factors considered here to find out the hygiene of the respondents are cleaning of teeth per day, frequency of bathing, hand washing before meals, clean of ears after bathing, wash of feet before entering into house, habit of nail growing, habit of taking oil-bath, habit of foot-wearing while going outside and wearing of clean cloths.

Almost all the respondents in the study area, clean their teeth once in a day in the morning before they take tea or coffee.
Among the sampled respondents, about 36.3 per cent take bath once in a day and 63.7 per cent of respondents do not take regular bath.

In the case of clearing the ears after taking bath, 70 per cent of respondents clean their ears. Remaining 30 per cent of them are not in the habit of cleaning regularly ears after bath.

About 72.8 per cent of respondents wash their hands before they take meal and 27.20 per cent of respondents do not wash their hands before taking meals.

In the case of washing of feet while entering the house 41 per cent respondents wash their feet and 59 per cent of the respondents do not wash their feet while entering the house from outside.

In the case of oil-bath, nearly 45 per cent of respondents took oil bath every week or once in a month. Remaining 55 per cent of the respondents take rarely oil bath.

Foot-wearing is not a common phenomena in the villages. Only the people who live in urban areas have the habit of wearing footwears while going outside. In the study area, only 41.32 per cent of the respondents are using footwears while going outside and 58.65 per cent of the respondents are not using footwears at all.
From the study of personal hygiene, it has been concluded that the hygiene conditions of taking bath regularly and wearing of chappies are very poor in the district.

HOUSEHOLD ENVIRONMENT AND SANITATION:

Sanitation consists in the disposal of solid and liquid waste from the houses. The term 'Solid Wastes' is applied to unwanted waste material from houses, street sweepings, commercial, industrial and agricultural operations, arising from man's activities. In the cities, it is called refuse, in the countryside, it is called litter and in general, it is called solid wastes. It is a conglomeration of dust, ash, vegetable wastage, paper and packings of all kinds, rags and other fabrics, glass and many other combustible and incobustible debris.

Housing is part of the total environment of man, and, being a part, it is, to some extent, responsible for the status of man's health and well-being. It is different, however, to demonstrate the specific cause and effect relationships, because housing embraces and effect relationships, as well as so many factors of environment. By deductive reasoning, a strong relationship can be established between poor housing environment and the diseases like respiratory infections like common cold, tuberculosis, influenza, diphtheria, bronchitis, measles, whooping cough etc. skin diseases like scabies, ringworm, leprosy etc., rat infestation like plague and accidents.

From the study, it has been found that nearly 46.3 per cent of respondents are living in the thatched houses, 24.5 per cent
of respondents are living in tiled houses, 16.3 per cent of the respondents are living in the terraced houses and remaining 13.9 per cent of respondents living in other types of houses.

Among the respondents 56.19 per cent responded that the general condition inside the house is clean about 43.81 per cent of the respondents responded that the condition inside the house is not clean.

There was poor response regarding cleaning the house surroundings. The respondents responded that about 26.71 per cent has clean surroundings and remaining 73.29 per cent of respondents do not have clean surroundings. About 28.32 per cent of respondents have the good ventilation and 71.68 per cent of the respondents do not have proper ventilation.

From the study, it has been found that about 46.31 per cent of the respondents possess cattle and pit animals. Majority of the respondents belong to the rural areas. Their main occupation is cultivation. The respondents have oxen, bullocks, buffaloes and other pit animals. However, about 79.32 per cent of the respondents who possesed cattles have cattleshed attached to their houses (photo). Perhaps it is one of the major unhygenic reasons for the occurrence of diseases in rural areas.

The waste products in the houses are dumped in the streets, they are used as organic manures. It has been found that 60.72 per cent of the respondents carelessly throw the daily house
wastes on the streets (photo). 20.16 per cent of the respondents utilize the waste products as organic manures and 19.12 per cent of the respondents dump their house wastes in the wast pits.

The disposal of human waste has become one of the major problems in the rural areas. It has been found that about 84.02 per cent of the respondents utilize the open toilets for disposal of human excrete. About 9.34 per cent of respondents posses western toilets and 6.64% of the respondents possess dry toilets.

**DRINKING WATER:**

Much illhealth in the developing countries is largely due to lack of safe drinking water. There can be no state of positive community-health and well-being without safe water supply. From the study, it has been found that the major source of drinking in the district are bore wells. About 65.72 per cent of the respondents get water from borewells. About 12.31 per cent of respondents utilize water from dugwells, 8.62 per cent of the respondents have protected water supply through taps and 13.30 per cent of respondents utilize water from other sources.

The most disappointing answer from the respondents is that about 91.38 per cent do not posses protected water supply. In the ground water, the levels of fluorides rang from 1.50 mg per litre to 2 mg per litre is found. Among the respondents only
2.32 per cent possess filters and 0.86 per cent have defluoridation filters.

From the study of water facilities in Anantapur District, it has been concluded that most of the people do not have protected water supply and consume fluoride water.

From the study of habits, personal hygiene, household environment, sanitation and water facilities, it is concluded that the majority of the population are irregular in personal hygiene, lack of good household environment, poor sanitation facilities, consumption of fluoride water, lack of protected water-supply and defluoridation plants.

All the above said problems seem to be the root-causes for the occurrence of more diseases in the district besides poor socio-economic conditions.

From the study of socio-economic conditions, it is found that about 63.24 per cent of the respondents are illiterates and 36.76 per cent literates. The family size is below 4 persons in 22.80 per cent. The family size varies from 4 to 8 in number in about 42.43 per cent and more than 8 in 34.58 per cent. About 54.30 per cent of respondents belong to the joint families and 45.70 per cent of the respondents belong to nuclear families. The income group below Rs.800/- per month are 58.84 per cent. About 27.6 per cent of respondents income varies from Rs.800/- to Rs.1600/- per month and only 14.86 per cent of the respondents have has income more than Rs.1600/- per month.
From the study, it has been concluded that illiteracy, poverty, poor hygiene practices, environmental conditions, poor household environment, sanitation and poor protected water supply are the major causes for the prevalence of the diseases in the district.

AWARENESS AND ADOPTION:

The awareness about the Polio drops, BCG, Triple Antigen, Smallpox vaccine, Loop, Niroad, IUD and Laprascopic among the respondents are very low. In this only 24 per cent are aware of Polio drops, 18 per cent are aware of BCG, 15 per cent was aware of Smallpox and 9 per cent was aware of Triple Antigen. The awareness about the family planning methods are very low. About 25 per cent of respondents are aware of Niroadh, loop, IUD etc. In general, the awareness relating to immunisation vaccines and temporary family planning methods is very low.

About the 78 per cent of the respondents adopted immunization for their children. Out of this triple antigen 32.2 per cent, polio 30.7 per cent and others BCG, Smallpox etc., are 37 per cent.

About 36.3 per cent of respondents adopted family planning. Out of this 85.2 per cent have adopted permanent method and 14.8 per cent temporary method. The permanent method adopted by the wives is 87.3 per cent and by husbands 12.7 percent.