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A study on diarrheal diseases affect mainly in children's: Thanjavur town, Thanjavur district, Tamil Nadu

T. Sangeetha and R.Baskaran

Department of Industries and Earth sciences, Tamiluniversity, Thanjavur

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ABSTRACT

This study involves diarrheal diseases model to estimate for Thanjavur town, Thanjavur district, and Tamil nadu. The years 2009 to calculate how to affect diarrheal diseases mainly in children's Thanjavur town, Thanjavur district ,Tamilnadu, I have employed GIS arc Info to digitize the maps and GIS-arc view to process the data combining with other analytical measurements to display the result.

Key word: Medical Geography, Diarrheal diseases mainly in children's, Thanjavur town, Thanjavur district, Geographical information system, and some cartography models.

INTRODUCTION

Health is common theme in most culture and in fact all communities have their concept of health as part of their culture. The current definition of health is and there is no single yardstick for measuring the health status. (Dubas 1952).health implied the relative of absence of pain and discomfort and a continuous adoption and adjustments to the environment to ensure optimal function.

Medical geography is a multi dimensional body of knowledge and at the same time it is a multifaceted approach aimed towards understanding the spatial aspects of human health problem. Medical geography is also known as Noso- geography in Greek word Noso means diseases. It's from an environment point of information is possible with information deals about the genetic aspects of human health as well as human behavior.

Water related diseases:
Mans health may be affected by the ingestion of contaminated water either directly or through food and by the use of contaminated water for purpose of personal hygiene and recreation. The

term of water–related diseases include the classical water- borne diseases developing countries carry a heavy burden of water related disease the heaviest being the , diarrheal diseases water related disease may be classified as follows.

I. Biological in full of water –borne diseases.
Present infection agents
a) Viral -rotavirus diarrhea in infant
b) Bacteria-typhoid and paratyphoid fever, bacillary dysentery, coli diarrhea, and cholera.

II. Chemical:
a) Dental health: high level of fluoride cause mottling of the dental enamel
b) Cyanosis in fact: high nitrate content of water is associated with methaemoglobinaemia
c) Cardiovascular diseases: hardness of water appears to have beneficial affect against the diseases.
d) Some diseases are transmitted because of inadequate use of water
e) Some diseases are related to the diseases carrying insects breeding like to near the water, malaria, filarial, arboviruses, and onchocerciaris.

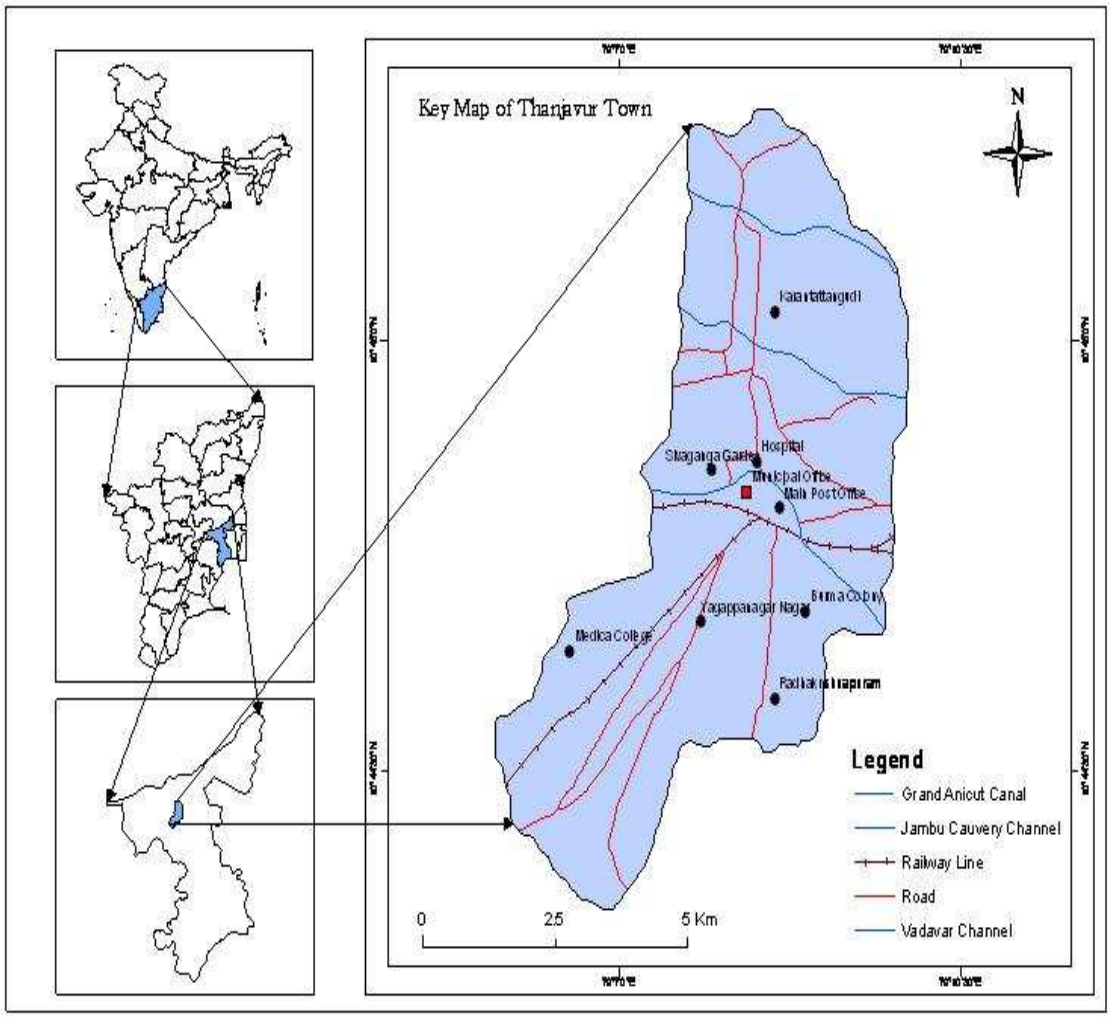
Study Area

Thanjavur town is a special grade municipality as well as district headquarters. It is at a distance of 350 km.from Chennai. The state head quarters are in the south direction. The town is well connected by road with adjoin town ,Trichy, Kumbakonam, Thiruvarur, Manargudi and Pudukottai which fall in the radius of about 50 km. the river Venner on the north and Trichy Chennai railway enclose the major ports of the town, the nearly extended area of the town is on the south east side of the railway line. The town is abounded by revenue of the villages viz., Akkaaamathottam, Mannakarambai, Kodikalur, Palliagrakaran and Rampuram at the north Kurunkulam,Gudalur,Kodikalur,Kadakodabbai,Ayushahibthottam,Puliyanthoppu,

Puduppattinam. at the east ,Vilar, Nanchikottai and Neelagiri therkuthotam, at the south and Ramanathapuram, Melavelivellur groups at the west the town spread over an area of 36.33 sq.km.and the local planning area containing village extends over 109.41 sq.km.

MATERIALS AND METHODS

The present studies data have been collected on primary data's. The medical terms are collected from some medical institution limited. Lack of secondary data and Primary data also collected. The all primary data's collected are processed and summarized by using suitable to identify how to affect diarrheal diseases (mainly in children's) in Thanjavur town. This Natural character for affected diseases has been analyzed by using suitable cartographic technique like simple graph, bar diagram and pie diagram etc. The data relating to the location maps are prepared by using GIS techniques.



To collect the primary data's to analysis, how to affect the diarrheal diseases (mainly in children's), and how to prevent the children s in this water borne diseases.

The main objectives of the study can be placed as follows:

I. To highlight the age wise distribution of affect the diarrheal diseases.
II. How to maintained the water, sewages ,toilets and wastages products,
III. Any animals are maintained and how to disposed the animals deposit.
IV. Food item of children's and others,
V. And any environmental institutions are near the houses.

Diarrheal Diseases

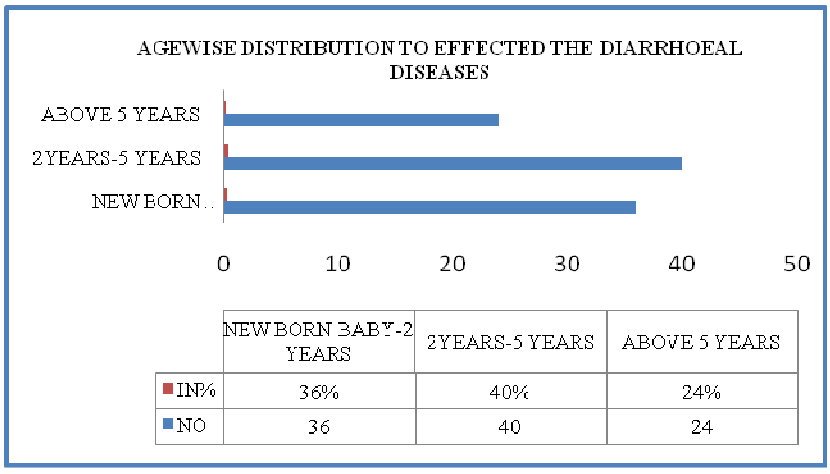
Diarrhea is defined as the passage of loose, liquid or water by stools. These liquid stools are usually passed more than three times a day; however it is the recent change in consistency and character of stools that is more important. The term of diarrhea diseases should be considered only as a convenient expression not as a nosological or epidemiological entity- for a group of

diseases in which the predominant symptom is Diarrhea. The division between acute and chronic diarrhea is arbitrary. Diarrhea lasting 3 weeks or more may be called chronic.

a) All acute diarrheas will by then have resolved. However the W.H.O UNICEF define "acute diarrhea "as an attract onset. which usually lasts 3 to 7 days .but may last up to 10-14 days
b) It is caused by an infection of the bowl. The term gastroenteritis is most frequently used described acute diarrhea, it is not strictly accurate because it does not give an indication of the causative organism, partly because of lack of laboratory services and partly because it is impossible and economically unjustifiable to confirm each case diarrhea by laboratory examination.
c) Further, there are certain without inducting any histological abnormality of the mucosa in many cases diarrhea stools are watery but if blood is visible in stools, the condition is called dysentery.

I. Age wise distribution of effected diarrheal diseases:

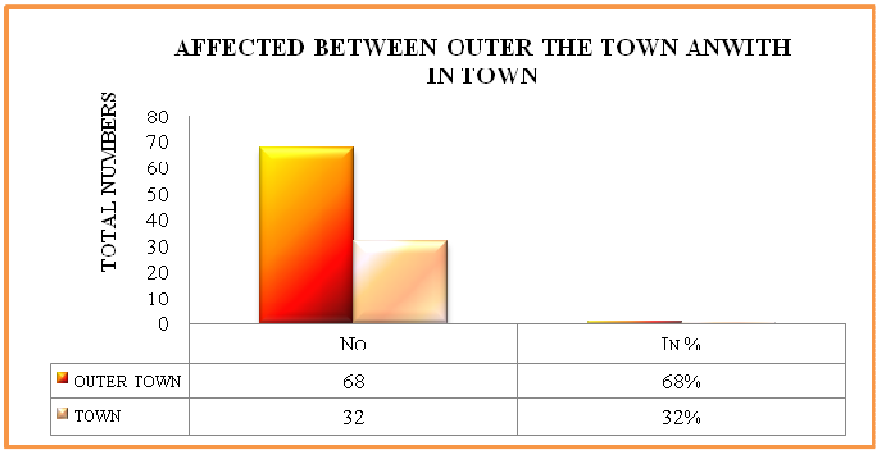
In this diseases heavily affected the children's. Mainly the 6 month baby to 5 years. This stage (new born to 2 years) children's must be fed up with milk i.e., breast milk. The other milk such as cow milk, lactogen easily produce diseases of diarrhea. The main reason of these children's are start to crawl so that the time the minute practical of foods like ground nut, fish bone, any non eatables, are to eat to this is to stored the stomach, it also heavily produced the diarrhea diseases. After the 5 years back the children are like to eat the hotel food, species foods, and non vegetarian foods also infection to get the diarrhea diseases. In this hotel foods and fast foods items to added the chemical aspects so this is not to affect the some bodies. Another one the unhygienic foods, unsafe water, colour and odur water.



	NEW BORN BABY-2 YEARS	2YEARS-5 YEARS	ABOVE 5 YEARS
IN%	36%	40%	24%
NO	36	40	24

Effected by diarrheal diseases between outer the town and within town:

In these diarrhea infections factors are unsafe water, colouring water to maintain the pet animals. The animal's faecals are near the house, sewerage is near the house, house wastage water is stored near the house. These all the main factors, so in the infection are effected in outer the town. The town peoples live in the separate plot and not to any maintained animals ,and not to any stored drainages pattern, that the reason of this infection are not affected the town areas.

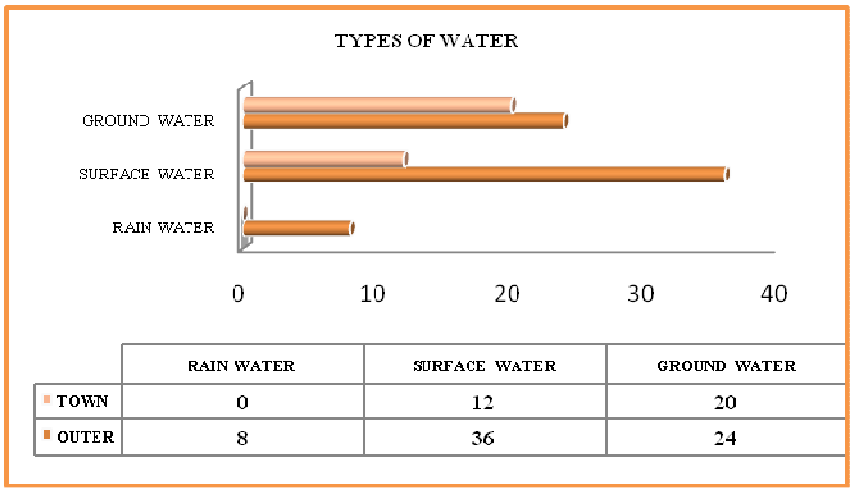


II. **Types of water**:

Water may be classified in 3 types.

I. Rain water
II. Surface water like reservoirs,lake,pond,river,streams,tanks
III. Ground water like shallow,well,deepwell,springs

Only the rainy season is the time to get the rainwater.otherwise no other way to get the rainwater.but now a days maximun of total peoples are like to get the surface water.but the surface water are to perennials. The outside people get surface water and ground water egually.but the town area side the surface water are not adequate. So the people like to get the ground water.



IV. How to use the water - boiled or un boiled:

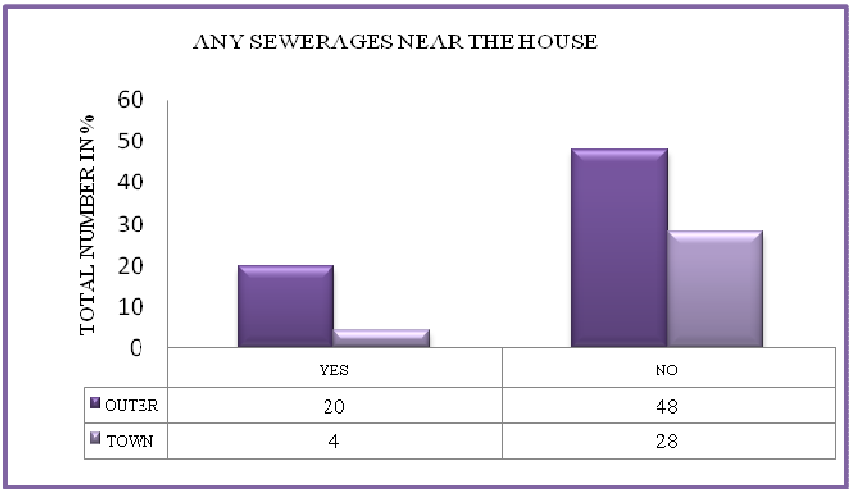
All types of people drink variety water .but the virus, bacteria are heavy in contaminated water. In this pathegons agent are very easy to spread infection to the peoples. So all water must be boiled. At the time of boiling water, bacteria and virus are dead. Otherwise not dead.To outside peoples mostly get the surface water, meanwhile this water is contaminated virus, bacteria. But

outer peoples did not boil the water. This is main cause for diarrhea infections. At the same time town peoples would like to drink water in boiled.

V. Any sewerage near the house:

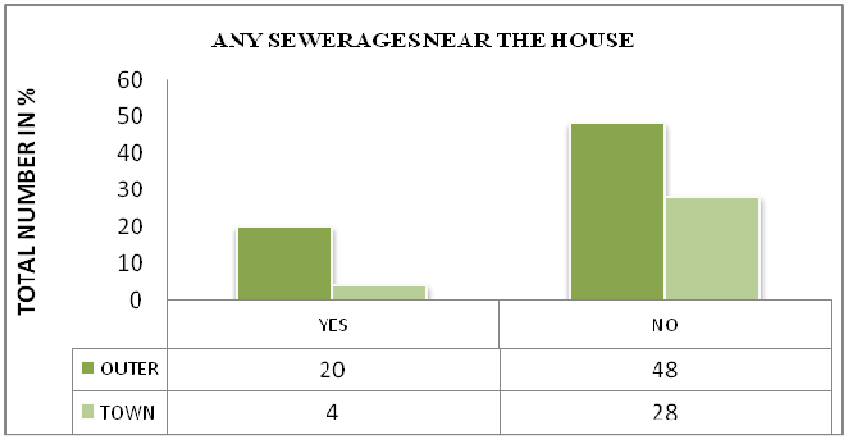
Sewerage is the main and most important agent factors of diarrhea diseases. The sewerage near the house is the cause of verity of diseases like malaria, cholera.ent infection, and urinary infections. In rural area side the sewerages' are not properly drained because of in correct drainage pattern.

At the time of playing children's are concentrated by the infection by foot and foot wears. It is way of distribution the infection to the family.



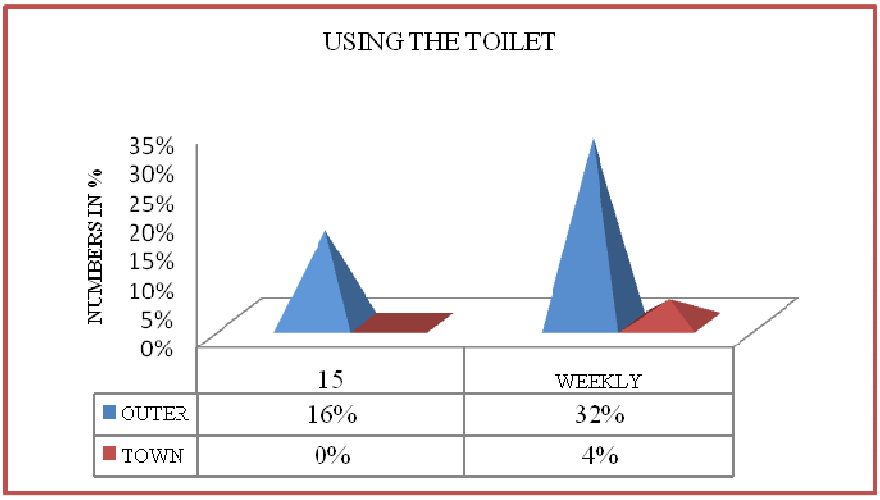
VI. Any house wastages stored in your house:

As in previous process the same process of the house wastages water. Not drink aging the waste water is the cause for virus, bacteria and other infection. If the water is properly drained the place will be dry and the pathegons are destroyed.In outer side also the water is not drained so infections are concentrating.



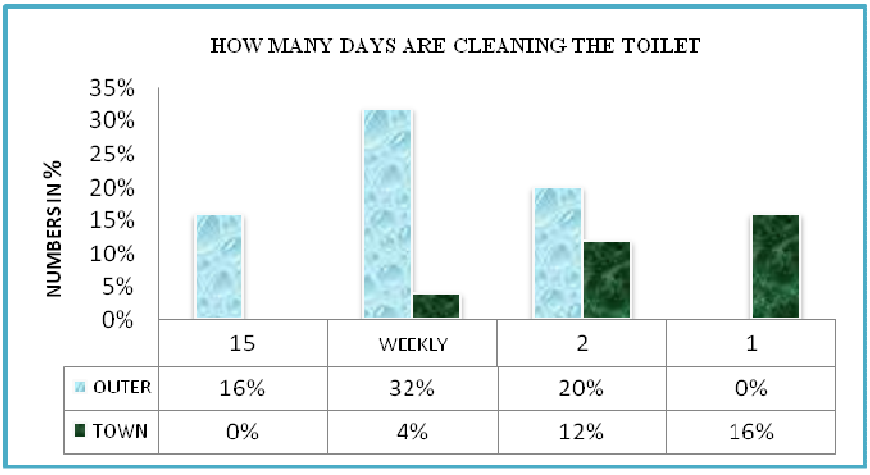
VII. Using the toilet:

Toilet can be used by pouring water and flush the excreta down into the skeptic tank pipes. A skeptic tank is one, which receives the sewage. Its then decomposed and purified by bacterial action. The outlet of the tank is lower than the inlet, which keeps the sewage from backing up into the toilet.The maximum of outer people use the toilet in outside. But the town area people separately build the toilet .but rented peoples use the common toilet. The main purpose of using the toilet is to flushing the stool in properly in the toilet.



VIII. How many days to cleaning the toilet:

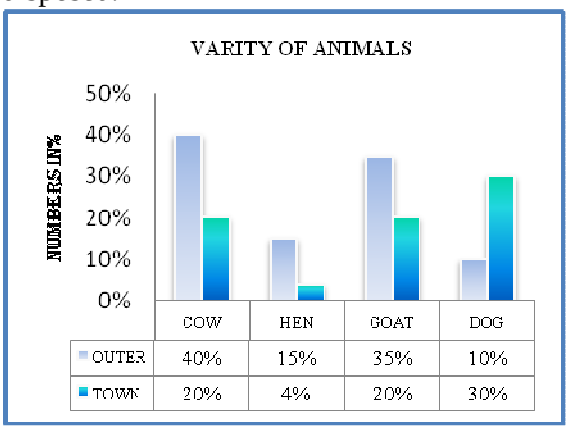
The outer people have the own toilet. But many people use the common toilet, at the same time they are in bad condition. They are cleaning once in 15 days, some people in weekly, once in 2 days or per day.Meanwhile in town areas peoples clean it weekly once. But all peoples clean per day or 2 days .we are cleaning once per day. So the infection agents such as virus, bacteria are died at the same not to reproduce the infections.

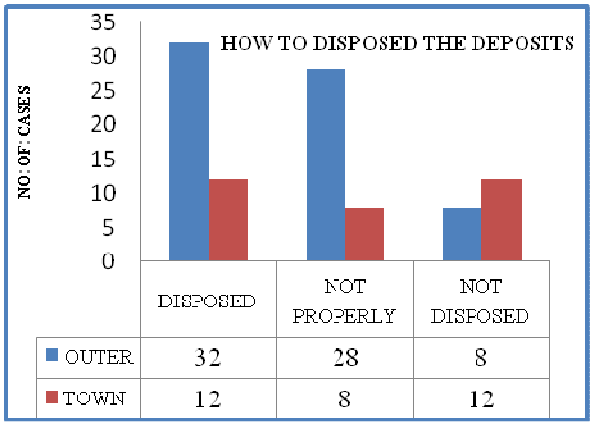


IX. Maintain the animals in your house:

Verities of animal are maintained in the people mainly in Thanjavur town. The people have maintained main domestic's animals are hen, cow, goat and dog. In these animals faccals would

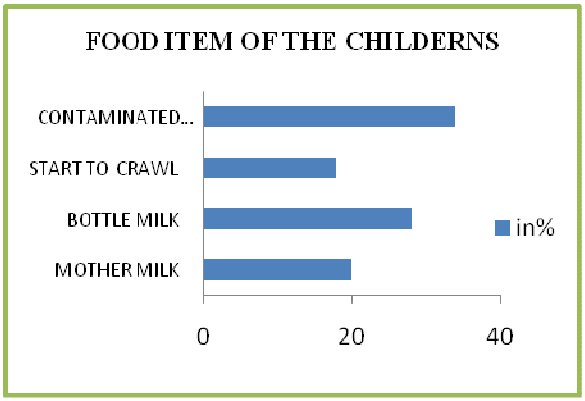
be properly disposed.The pet animal's faccals are not to properly dispose in the outside peoples. It's heavily dangerous. In town peoples rarely maintained the pet animal's faccals are properly disposed.

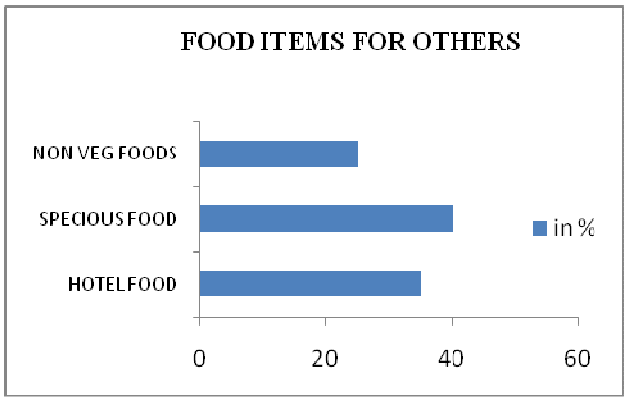




X. Food item:

While chronic diarrhea is responsible for the serious problem of malnutrition, acute diarrhea is responsible for the serious dehydration. It is a widespread problem in the country, specially affecting the children below five years of age. The disease in town area is lower than outside the town. The new born infant sings dehydration can be treated by the breast feeding alone. Contaminated food, bottle milk is not favorable to children because their preparing purpose is bad. Some times in preparing the food by hand, unclean spoon are unsafe factors. At the same time children above 5 years of age like to eat specious food, hotel food .its hygienic.

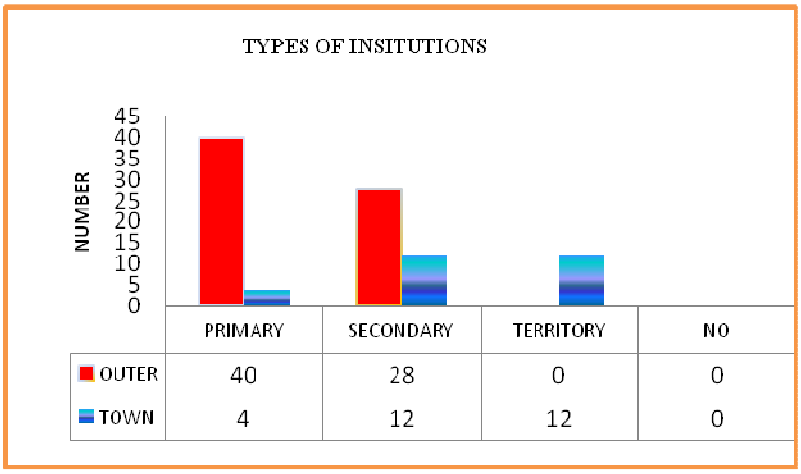




XI. Any environment institution near by the areas:

The term environment sanitation is now being replaced by environment health. Proper environment health now requires the services of the public health qualified doctors, the epidemiologist, the public health engineers, the town planner, the socialist, the economist and the health inspectors.ther are in three types

a) Primary health centers: first contact health.
b) Secondary health centers: complete health problem.
c) Tertiary health center: highly specialized to medical care.



CONCLUSION

In this present study of the Diarrheal diseases are affected in the Thanjavur town. For this purpose the primary data's are collected was using the questioner around 100 patients are visiting various hospitals of thanjavur town. Form the points of patients the inference have been summarized.

I. In this Diarrheal diseases highly affected in new born baby, children around 5 years. It's become to unhygienic food and non proper preparation. Above 5 years peoples also are affected Diarrheal diseases. It's come to knew they affected of hotel food, species food and non veg. But they are minimum amount of affected of Diarrheal diseases

II. In other are concentrations of water content. in the rain water is the pure full water but not to get throughout the years, The outer and town peoples are mostly used in the surface water(pond, lake, reservoirs, river and tank).but in this water not purified because lots of agricultural wastages and some animals wastages are partly concentrated in this waters. Mostly the town peoples are used in underground water.

III. Third main factors are using toilet this infection is the main and superior infection of the Diarrheal diseases .The town side peoples are mostly used in own toilet room so lees peoples are affected. But the outer side of peoples is mostly used in common toilet room so they are not in proper clean so these Diarrheal diseases mostly spread along from this via.

IV. Non proper disposal of animal's facels in outer side peoples.

V. Lacks of Health institution in both side.

Preventive measures:
Sanitation, health education, immunization, fly control is all the main preventive measures of the Diarrheal diseases.

Sanitation: impure water supply, disposal of domestic wastages, food hygienic, adequate supply of drinking water and the child stools are promoted.

Health education: breast feeding, improved warning, clean drinking water, plenty of water for hygienic and proper disposal of children stools.

Immunization: Agent's measles is a potential intervention for Diarrheal diseases control. When administered at the recommended age, the measles vaccine can prevent up to 25% of Diarrheal diseases to death in children under 5 years ago.

Fly control: f lies breeding in associated with human or animals' faecals should be controlled.

REFERENCES

[1] Bhaskaran T.R **1973** *Indian J med.res*.304.
[2] Government of India **1977** manuals on water supply and treatment second edition- central public health and environment engineering organization ministry of work and housing, New Delhi.
[3] Indian council of medical research **1975** manual of standards of quality for drinking water spl.
[4] Pizzaro d. 1985 dialogue on diarrhea issue no: 22 spet **1985** AHRTAG 85 Marylebone high street London.
[5] Rajagobalan s and siffman m.a **1974** guide to simply sanitary measure for the control of ethnic diseases W.H.O. Geneva.
[6] Subramanyan, K.amd Baskaran J.R. *Indian J.Med Res* 32,211.
[7] Surveillance and control of acute Diarrheal diseases
[8] Thanjavur town master plan received as on **2009**.
[9] The world W.H.O. in se. Asian region report of the regional direction 1 July **2002** in New Delhi.
[10] W.H.O **1985** treatment and prevention of acute diarrhea .guideline for the trainers of health workers Geneva.
[11] W.H.O.**1992** reading on Diarrheal diseases students manuals.
[12] W.H.O. **1984** guideline for drinking water quality and recommendation.