



International Journal of Ecology and Environmental Sciences

www.ecologyjournal.in

Online ISSN: 2664-7133; Print ISSN: 2664-7125

Received: 21-01-2020; Accepted: 22-02-2020; Published: 25-03-2020

Volume 2; Issue 1; 2020; Page No. 20-21

The lake environment related to population health with reference to the Adilabad district lakes, Andhra Pradesh, India

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Abstract

Adilabad district is a famous natural, Forestry, Tribal district. It is one of the backward district more percentage of land occupied by forest area. Plenty of lakes have this district it is useful for daily activities. Forest region people use of this water cause to generate water born disease like: kalara, diarrhea, skin disease. In research period discuss with RIMS Doctors in rainy season Malaria, dengue fever spread fastly. Forest lakes sarroundings cause to musquito development, it is cause Malayria, Dengu fevers, it is avoid the awareness of people. Forest area lake sarrounding living people use this water drinking purpose it is cause to kalara, diarrhea, ittching disease. Forest living people using lake water, cleanness of lake sarroundings and take precautions are aviod this problem. Establishment of PHC in forest village (tribals) areas very simple avoid this problem.

Keywords: forest area, diseases, rainy season

Introduction

Ancient and modern civilization were developed at the water resources region. Water is essential source for development of any civilization in history like: Harappa, Sindu civilizations. Food productivity is related to the availability of water resources land availability. Water is the main source to living of all the organisms in the world. UN declare 2012 "World Water Year". Heavy water in rainy season main cause to spreading of water born disease like Diarrhea, Kalara, Skin disease. Seasonal cyclicity is the famous feature of transfarm diseases, ubiquity feature of human infections diseases comes from illitarate this type of environment present in Forest villages. In India seasonal spread feature diseases are: Malayria, Dengu, Kalara, Diarrhea, Skin rash 1. Malaria is one of the most common major heath dieasas in developing countries in Asian countries 3.Day to day increasing of human being population, alternatively increasing of population needness as well as increasing pollution levels in lake environment. Forest area lakes are the main source to tribal people in adilabad district. It is using for drinking, irrigation, daily activities it is cause to generate seasonal cyclicity disease generate.

Material Methods

The water samples were taken early morning hours. After collection of water samples preseved in 4% formaldehyde solution. Physico-parameters were analysed at lake environment. Chemical parameters were analysed in the laboratory according to APHA (2005) 4. RIMS Doctors discussion was useful for collecting the data of season wise diseases.

Daily newspapers information is useful for analysed the data collecting information total area of the urban, forest region lakes.

Results

During my investigation period from 2008 to 2017 ten years of observation of Adilabad district newspapers given information and discussion with RIMS Doctors, Students.

Fallowing information were collected broadly analysed

Table 1

Phy- Chemical parameters	Urban Lakes	Forest Lakes
1)Air Temperature	12-33°C	11-32°C
2)Water Temperature	11-28°C	10-27°C
3)ph	7.2-7.94	7.5-7.9
4) Transparency	28-34 Cm	20-34 Cm
5) Turbidity	20.5-29.5 NTU	12-16 NTU
6) Total Hardness	172-194mg/lit	150-172mg/lit
7)TDS	285-490mg/lit	210-340mg/lit
8)DO	4.2-4.8mg/lit	2.9-3.8mg/lit
9)BOD	4.2-5.2mg/lit	3.3-4.21mg/lit
10)COD	14.2-11.1mg/lit	4.1-5.7 mg/lit
11) Chloride	70-91mg/lit	35-45mg/lit
12) Phosphate	120-150mg/lit	82-92mg/lit
13) Sulphate	120-145mg/lit	75-85 mg/lit

Broadly examine the yearly recorded number of candidate's n/c disease wise

Table 2

Years	Malayria n/c	Dengu n/c	Diaeehria n/c	Nematodes n/c	Calara n/c
2010	600	-	400	800	01
2011	555	100	508	744	03
2012	485	102	501	688	06
2013	474	57	426	691	12
2014	467	45	456	433	08
2015	461	47	326	426	05
2016	444	33	322	409	08
2017	428	39	303	404	06

In my investigation period in forest area villages were suffering from Malaria disease in rainy and winter season. Mainly in rainy season village surroundings lake environment cause to spread of Malayria disease lakes surroundings are use to developing of musquitod 3. Highly spread of Malayria disease species

1. *Plasmodium vivax*
2. *Plasmodium palsiparum*
3. *Plasmodium malaria*
4. *Plasmodium Ovale*

High number of Malayria disease identified in the year 2011 low number were identified in the 2017. Malayria transmission is seasonal with increase intensity related to rains most of the Indian people no immunity 3. Now a days also forest villages people is use for treatment different forest leafs various tribal communities in India (Koya, Gondu, Lambada etc..) During the research period diarrhea cases highly spread in rainy season in this season most of the forest people using this lake water drinking purpose in forest areas. Accoring to RIMS Doctors discussion highly number of diarrhea (2011) cases find out in rainy season low number were identified in summer season (2017)1

During my investigation period Dengu, spread highly in 2011 low number were recorded 2017 most of the people living in Forest area it is well environment to developing of musquito population. Day by day incresing number of Dengu cases in urban, forest villages lack of cleanness sarroundings of villages, lakes are use to production of musquitos 2. It is cause to phylarisis disease also spread highly in forest area people compare to urban area people.

In my investigation period, nematodes parasites were identified in lake water. Most of the village lakes have high nematodes parasites compare to urban areas these parasites cause to itching of the population bodies. High number of Diarrhea diseases cases find out in rainy season compare to summer season. In my research period 2012-13 so many kalara cases were identified in forest people. High number kalara cases identified on 2013 low number were recorded in 2010 1.

Disease spread ratings:

Diaeehria>Malayria>Dengu>Kalara

Suggest Precautions

1. Avoid forest lake drinking water
2. Musquito nets use compelsary in forest villages
3. Gambusia fish growth encourage in Forest & urban lakes
4. PHC number increase in forest villages
5. Don't use lake water for bothing
6. Awareness phogramme conduct by NGOs, Present Government

Conclusion

During the ten year of investigation period collected data from district newspapers, RIMS doctors rainy season urban, forest lakes sarrounding environment suitable to growth of musquito population. It cause to spread Dengu, Malayria, phylarisis. Lake water use fot drinking in forest area spread fallowing diseases diarrhea, kalara. According to RIMS doctors discussion, district daily newspapers information i am concluded lake sarroundings cleanness are the main important for avoid this diseases. Day by day urbanization, modernized technics, increasing PHC are decrease the number of candidates from this diseases

Acknowledgement

I am thankful to RIMS Adilabad district doctors to discuss of this topic

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