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“Advanced Studies in Geography”

Chief Editor

Dr. R. V. Bhole

'Ravichandram', Survey No. – 101/1,
Plot No. – 23, Mundada Nagar,
Jalgaon (M S) – 425 102

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KES's Pratap College (Autonomous)
Amalner, Dist. Jalgaon - 425 401

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A GEOGRAPHICAL ANALYSIS DIARRHEA DISEASES IN SATARA DISTRICT

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ABSTRACT: -

Any Disease come from food, destroy the functioning of Human body "Disease is a specific symptoms and problems of all body and particular part of body. After the origin of earth and environment, human existed on earth. From existence, food, shelter and water is the basic need of human has completed from the environment. Life of human becomes restless but has involved the several problems is referred as disease and depict the functioning of human body in fact, diseases have originated dominantly and increased after the industrialization mainly in the developed countries. The industrialization has resulted high concentration of industries in the geographical area of country. Those industries have produced the all pollutions like air pollution, sound pollution, water pollution, soil pollution etc. in this paper we study the Typhoid affected people in the study area and find impact of malaria diseases in Satara District. This proposed study is based on the collection of data from health care centers, hospitals and extensive field survey by the statistically tabulated, interviews, questionnaire method.

INTRODUCTION: -

A disease is internal problem of human body made weakness as well as destroys the mental balance of human body. As different sources, the word disease was firstly used in its literal sense early 17 centuries as meaning of "discomfort, inconvenience of human body. From Wikipedia, the free encyclopaedia, "A disease is any condition which results in the disorder of a structure or function in a living organism that is not due to any external injury "According to World Health Organization,

A failure of the adaptive mechanisms of an organism to counteract adequately, normally or appropriately to stimuli and stresses to which the organism is subjected, resulting in a disturbance in the function or structure of some part of the organism.

Webster defines disease as "A discomfort, a condition in which bodily health is seriously attacked, and impaired, which is a departure from a state of health. An alternation of human body interrupts the performance of vital functions". The Oxford English dictionary defines disease as "A condition of the body or some part or organ of body in which its functions are disturbed" Also, defines disease as "A condition which confines life in its power, period or enjoyment. Disease is a departure from a state of health. It means dismissal of ease and a person becomes uncomfortable and unhappy.

STUDY REGION: -

Satara district is one of the leading districts of Western Maharashtra. It is situated in the western part of the State and lies between north latitudes $17^{\circ} 05'$ and $18^{\circ} 11'$ and east longitude $73^{\circ} 33'$ and $74^{\circ} 54'$. The total area of the district is 10480 sq. km. The district is bounded in the north by Pune district on the east by Solapur district, on the south by Sangli district and on the west by Ratnagiri district of Konkan region. Sahyadri hills of western ghat forms the western boundary, while Nira River forms the northern boundary of the district. The district having tropical wet and dry climate. Average highest temperature 30.8°C and average lowest temperature is 18.64°C . The average precipitation of the region is 1125.01 inch. Average elevation of the region is 742 meters. For administrative convenience, the district is divided into 11 tahsils. It has total Population 3003741 as per 2011. the male population is 1510842 and female population is 1492899 with literacy rate 82.87%. Population density is 287 persons/sq. km. The district has 15 towns. Administratively there are 11 talukas viz. Satara, Patan, Karad, Wai, Khandala, Mahableshwar, Javoli, Man, Khatav, Phaltan, Koregaon, 1739 villages, 11 Panchayat Samitis, 1488 Gram Panchayats and 8 Nagar Parishads. Sex ratio is 988.

OBJECTIVES: -

In view of the above, main objectives of proposed study are as following:

- To study the Diarrhea affected people of the study area.
- To find impact of Diarrhea diseases in Satara District.

DATABASE: -

The proposed study will be depending on primary as well as secondary data. Primary data will be collected through the questionnaire. For the purpose villagers will be chosen by stratified random sampling, and photographs, video shooting will be collected for the better understanding of the study region.

Secondary data will be collected through the related reference books, magazines, published, unpublished thesis, journals, and published Govt. Report, District Census, hand book, the record of health centers, government hospitals, Newspapers, Other media reports, and related websites. And world Health Organization data

METHODOLOGY: -

The present study is based on the collection of data from health care centers, hospitals and extensive field survey by the statistically tabulated, interviews, questionnaire method. Some mathematical processing will be carried out and the inferences may arrive. There is no definite method to apply to such study but statistical method, cartographic techniques. Concentration ratio, impact method will be used wherever necessary different terms and observations used in the texts have been defined and explained in glossary at the end.

DISCUSSION & RESULT

Diarrhea:

1. Diarrhea is a pre-existing condition or epidemic that is frequent throughout the summer months all over the world. This can be significantly higher in rural areas. N.S. Deodhar and J.K. Adranwala, 1971
2. Diarrhea is associated with frequent loose motions. It is due to several causes, which include overeating, eating indigestible and unrepented or overripened foods, and fruits. The inflammation is caused by microorganisms.
3. Diarrhea is a disease observed all over the world. During 1350-1400, the word "Diarrhea" was used in middle English to mean "flowing through". Generally, many people face Diarrhea for less or more than a day once or twice each year. It has a condition of at least three loose as well as fluid bowel movements per day. That disease is caused by geographical factors, specifically climate and water.

Distribution of infected, recovery and deaths of Diarrhea disease patients in Satara district. (2011-20)

Sr. No.	Tahsil Name	Population	Infected	Recovery	Recovery in %	Death	Death in %
1	Karad	583360	1121	935	83.40	186	16.59
2	Patan	299634	876	781	89.15	95	10.84
3	Satara	501670	1043	892	85.52	151	14.47
4	Javali	107890	247	228	92.30	19	7.69
5	Mahabaleshwar	72840	123	112	91.05	11	8.94
6	Wai	200741	243	212	87.24	31	12.75
7	Khandala	137450	148	115	77.70	33	22.29
8	Phaltan	342696	712	598	83.98	114	16.01
9	Koregaon	257327	645	559	86.66	86	13.33
10	Khatav	275099	578	492	85.12	64	11.072
11	Man	225193	648	584	90.12	54	8.33
	Total District	3003900	6384	5540	86.77	844	13.22

Source: Satara Health report 2011-20

Distribution of infected, recovery and deaths of Diarrhea disease patients in Satara district (2011-20)

DISTRIBUTION OF INFECTED, RECOVERY AND DEATHS OF DIARRHEA DISEASE PATIENTS IN SATARA DISTRICT (2011-20)

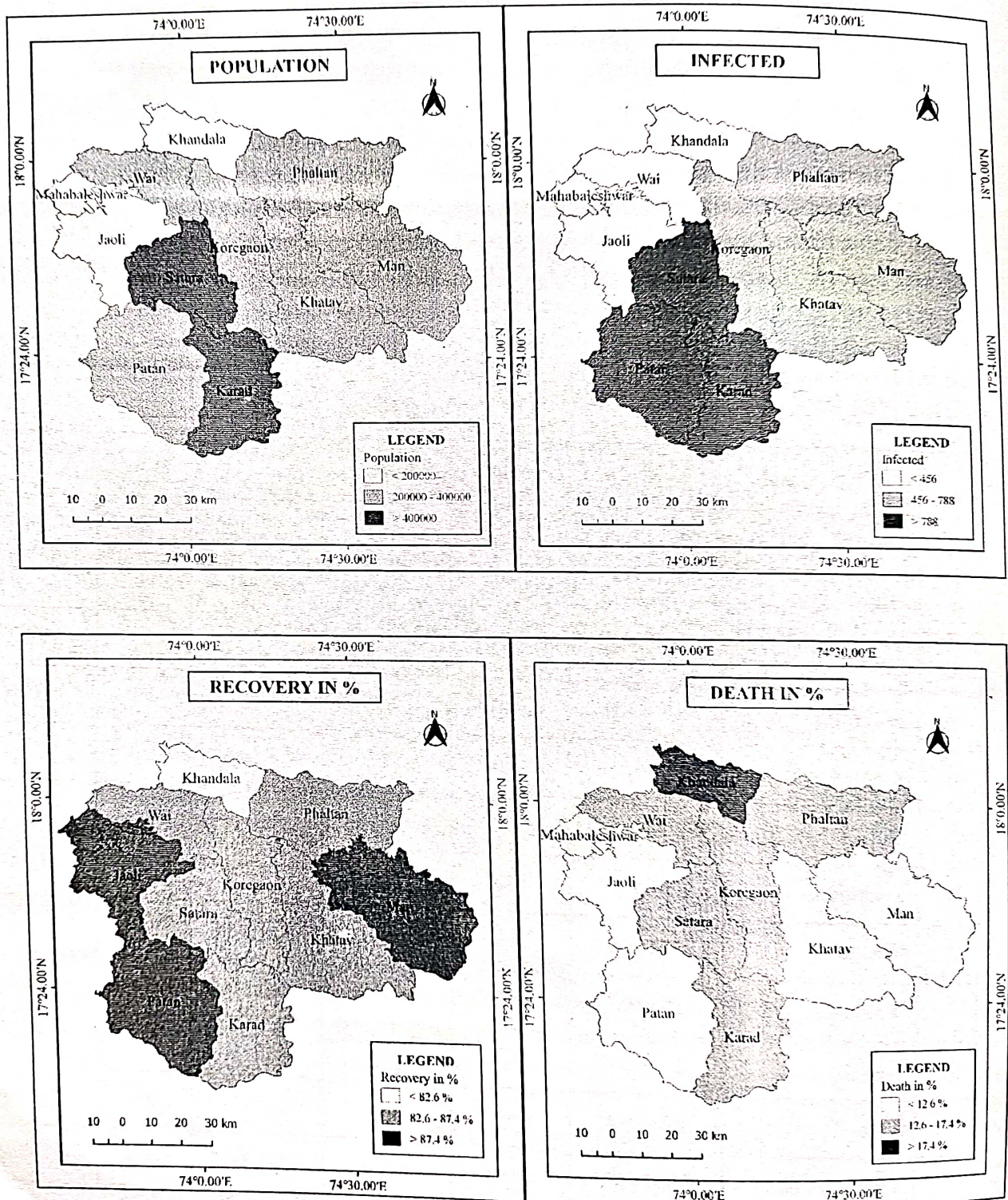


Table show the infected, recovered, and death rate of patients with Diarrhea diseases in Satara district (2011-20). The lowest number of infected patients, i. e., below 456 patients, are found in Khandala, Wai, Mahabaleshwa, and Javali tahsils. The medium between 456 and 788 patients is found in Koregaon, Phaltan, Khatav, and Man tahsils. The highest, i. e., above 788 patients, are found in Satara, Patan and Karad tahsils. In the Satara district, approximately 87 percent of patients are recovering from the Diarrhea disease. Here The highest recovery rate is found in Mahabaleshwar, Javali, Patan, and Man Tashil; the medium recovery rate is found in Wai, Satara, Koregaon, Phaltan, Khatav, and Karad Tashil; and the lowest recovery rate is found in Khandala Tashil. 13% of patients are dead due to diarrheal diseases. The highest death rate is found in Khandala Tashils, the medium death rate is found in Wai, Satara, Koregaon, Phaltan, Khatav & Karad tashil, and the lowest death rate is found in Mahabaleshwar, Javali, Patan, & Man tashils

References:

1. Brunton, D., & McLean, I. (2004). *Health, disease and society in Europe, 1800–1930: A source book* (1st ed.). Manchester University Press. Pp-22.
2. Cliff, A. D., & Haggett, P. (1989). *Atlas of Disease Distributions: Analytic Approaches to Epidemiological Data* (Blackwell Reference). Blackwell Pub. Pp-8-12.
3. Deodhar, N. S., & Adranvala, J. K. (1971). *Basic preventive and social medicine*. Prakashan.
4. G.Y. Rane prakashan, Tilak road, Sadashiv peth, Poona. p. 329, 462, 466.
5. District Gazetteer of Satara District. Pp-58, 121-123.
6. Government of India: India's Five-Year Plan Report, P. 9, 10.