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A STUDY ON IMPACT OF FACTORS INFLUENCING ZONOTIC AND SKIN DISEASES LIKE LEPTOSPIROSIS WITH RESPECT TO EPIDEMICS IN VISAKHAPATNAM ANDHRA PRADESH

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Abstract

The notion of social capital has become increasingly important in connection to several related disciplines over the past ten years or so, such as the identification of factors that influence educational attainment, the explanation of disparities in participation in formal and informal adult education, and the conditions necessary for the creation and improvement of institutions and practices that promote lifelong learning. Social capital has been described in several ways in these contexts, all of which have been connected to shared norms, values, and relationships that mirror the participation of people in "a common life based on family and community." From this perspective, community development education seems to be directly related to improving social capital, since community development is generally defined as a social learning process that helps people become active participants in collective efforts geared towards socioeconomic progress. By examining a variety of significant topics about the assumed links between community development and social capital improvement, the author of this essay challenges the legitimacy and effectiveness of social capital as an analytical tool in adult education research. ANOVA and multivariate approaches were used to examine the data. We pinpoint the contributing factors to maternal health in rural lifestyles, as well as the root causes of health problems and risk factors for individuals.

Keywords: Social Capital, Community Development, Adult Education, Lifelong Learning, Socioeconomic Progress, Maternal Health.

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Introduction

Depending on the disease's characteristics and the variables that contribute to its development, epidemics can impact a local group or spread across nations [1]. Throughout history, epidemics have happened, including the Spanish flu in 1918, the Black Death in the 14th century, and more contemporary outbreaks like COVID-19, Zika virus, and Ebola.

Infectious illnesses that are spread from animals to people are called zoonotic diseases, or zoonoses

These illnesses can be brought on by bacteria, viruses, parasites, or fungus, and they can be transmitted by direct animal contact, eating animal products, or being carried by vectors like ticks and mosquitoes.

The bacterial zoonotic disease leptospirosis is brought on by the *Leptospira* species.

Humans typically contract it by coming into touch with food, water, or soil that has been tainted by the urine of infected animals [2-3].

Factors may include environmental factors, occupational exposure, socio economic factors and climatic conditions [4]. The variables incorporated in the present study are knowledge, sewage waste, children expenses, drinking water facility and treatment centers facilities [5].

Aim

The purpose of this study was to shed light on the socioeconomic changes and lifestyle shifts that lead to pressing health concerns for the majority of indigenous communities.

Methodology

The present study is a compilation of various studied visakhapatnam populations of India by research scientists. By comparing the peoples from different geographic region and find out the reason of poverty and under nutrition among them even after providing support and funds from government and other organizations was incorporated.

Results/Findings

Their initial takeover gave way to the current one, which disturbs the balance of the peoples existence. Their health may have deteriorated due to the abrupt shift from farming or hunting and gathering to daily wage workers. According to WHO criteria, the majority of tribal people had a mean value of less than 18.5 kg/m², which is deemed underweight.

Results and Discussion

Knowledge

Figure 01 show the data plotted against the percentage of people and different camp categories. The majority of the population utilizes wells for awareness campaigns (51.22%), as seen in this graph, while the second one obtains a large percentage in comparison to awareness campaigns, specifically treatment campaigns (34.15%) and health drives (14.63%). The proportion of people is indicated by the color red, while the number of people is represented by the color in this picture. A failure to recognize mosquito breeding sites, such as standing water and unclean environments, as well as a delayed identification of symptoms like fever, chills, and vomiting, could be the cause and justification. The problem may get worse if there is a delay in getting medical care, if there is little use of preventative measures such as repellents, mosquito nets, and protective gear, and if there are myths and misconceptions about the disease and how it spreads. [6].

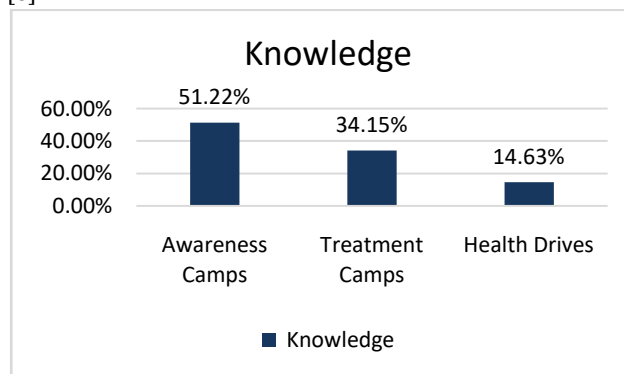


Fig. 01 Knowledge

Sewage Waste

For the number of people and the percentage of the population, the graph in Figure 02 is plotted against the kind of sewage systems. According to this graph, the majority of people utilize open areas for sewage purposes, which accounts for a large proportion (69.33%) of the total, compared to private restrooms (25.33%) and public toilets (5.33%). In this diagram, the percentage and sewage waste are represented by color. Waste is safely handled and kept apart from the water and food supply [7], and the cause and explanation may be direct contact with excrement, flies, and water pollution.

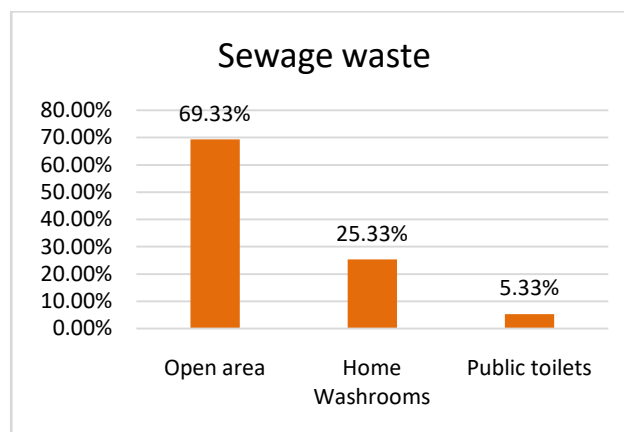


Fig. 02 Sewage Systems

Children Expenses

The graph in Figure 03 compares the percentage of respondents to the amount spent on their kids. This graph demonstrates that a larger proportion of individuals prioritize food and health (68.49%) over education (26.03%) and both (5.48%) [9]. The percentage of family spending on children is represented by color in this figure. a household allocates money for the food, health, and education of its children. Due to budget limitations, families may be forced to choose low-quality, contaminated food when children's needs in these areas are underfunded or ignored. Youngsters are ignorant about the fundamentals of food safety and hand washing.

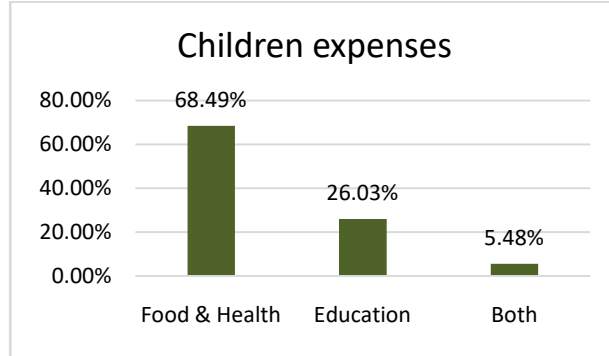


Fig. 03 Children expenses

Drinking Water Facility

The graph in Fig. 04 depicts the % of people versus the kind of drinking water facility. According to this graph, a greater proportion of people utilize city water (72.73%) than borehole water (19.48%) and both (7.79%). The percentage of people using drinking water facilities is shown in this fig. by color. The cause and rationale may be that the lack of toilets and waste treatment facilities increases the danger of infection from using untreated or insufficiently filtered water. Additionally, people might not comprehend the need for boiling water or hand washing [8].

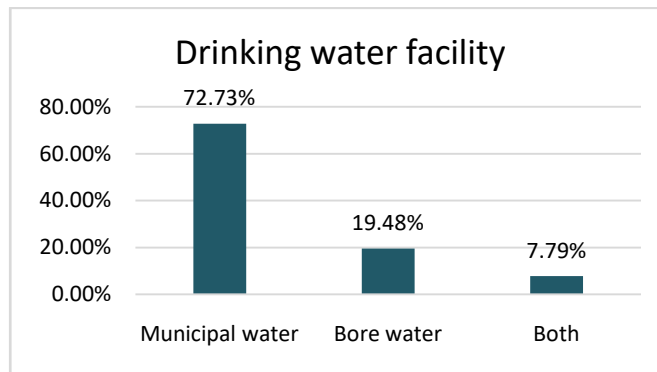


Fig. 04 Drinking Water Facility

Treatment Centers Facility

The proportion of individuals and treatment facilities is depicted in the graph in Figure 05. As shown in this graph, the majority of respondents favored PHC for their care, with a higher percentage (73.61%) than those who used the government. hospitals (20.83%) and for their health (5.56%). The different colors in this figure represent the ratio of treatment facilities available for individuals. The cause and rationale might be that government hospitals offer free outpatient care, and primary health centers could offer much lower or free prices for therapy, lab tests, and drugs [10].

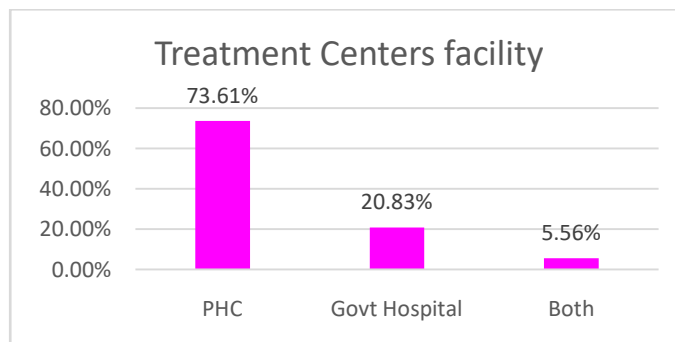


Fig. 05 Treatment Centers facility

Table 01 ANOVA single factors

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
Knowledge	30	41	1.366667	0.378161
Sewage waste	30	75	2.5	0.465517
Children expenses	30	73	2.433333	0.736782
Drinking water facility	30	77	2.566667	0.46092
Treatment Centers facility	30	72	2.4	0.662069

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	29.97333	4	7.493333	13.85884	1.35E-09	2.434065
Within Groups	78.4	145	0.54069			
Total	108.3733	149				

The ANOVA table has an official F test for the impact of the single factor. Analysis of variance, sometimes referred to as ANOVA, is a statistical method for comparing the means of two or more sets of data. If the p-value is true, there is a 1.35E-09 probability of obtaining an F statistic of 2.434065 or higher.

Conclusion

It's hard to conclude about zoonotic diseases and that too especially leptospirosis as it is a vast and huge topic to discuss. Some points observed and noted in this survey are concluded below

- A major zoonotic epidemic illness, leptospirosis presents a major public health concern, particularly in tropical and flood-prone areas.
- It is a disease that is strongly linked to environmental and socioeconomic factors since it is spread by contaminated water and contact with diseased animals.
- Reducing its spread requires effective prevention measures, such as better cleanliness, rodent control, wearing protective clothing, educating the public about public health, and vaccinating animals.
- Complications and mortality can be considerably decreased by early identification and treatment with the right antibiotics, such as penicillin or doxycycline.
- Controlling outbreaks requires enhancing access to healthcare, raising awareness, and fortifying surveillance systems.
- Prevention, prompt medical attention, and community involvement can all be used to effectively manage leptospirosis and reduce the risk of an epidemic
- The ongoing review confirms that, despite a few interventions, the level of the economy and health remains very high for people who live primarily in rural and urban areas in visakhapatnam region in Andhra Pradesh, India. The cattle keepers are mostly viable to zoonotic diseases as it is their livelihood and need more information about cleanliness and awareness camps about zoonotic diseases.

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