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A Comparative Study on the spread of Dengue due to pollution in the adjoining areas of Beliaghata Canal and Bagjola Canal in Kolkata: A Sociological Study

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ABSTRACT

The research was done in Kolkata in the ward 14 and ward 26 along the adjoining areas of the Beliaghata Canal and Bagjola Canal in the state of West Bengal. The researcher used both quantitative and qualitative method in this study. The researcher conducted Focus Group Discussion (FGD) with the fellow participants, while conducting the survey. The result showed that the knowledge on hygiene and sanitation was the major problem causing the public health issue in those wards in Kolkata. During the monsoon the water gets logged in the narrow lanes, where the Aedes Aegypti mosquito breeds and thus causes Dengue in those areas. The researchers in this study collected primary data from the ward 14 and ward 26 and tried to compare and contrast the problem of hygiene and sanitation and the related public health issue causing Dengue in those two canals areas, Beliaghata and Bagjola canal in Kolkata. The researcher found the poor sanitation and pollution in these two canals where the plastic cups, plastic bottle, plastic plates, coconut shells all clogged the drains and canals causing the Aedes Aegypti mosquito to breed in those containers during the monsoon causing the spread of Dengue.

Key words *: Canal, Dengue, Monsoon, Pollution, Sanitation*

Introduction

In India the major problem with Dengue occurs when the monsoon comes or on the onset of monsoon. Especially in the urban areas, where the city is full of people who lived in basties, the water gets logged in the roads in between the houses. More over the construction of Metro in the areas of East – West Metro in Kolkata (Mondal, 2020) during the rainy season water gets logged in pool like big holes in the heart of the city, and making it a very big breeding ground for the mosquitoes like Aedes Agypti. As these type of mosquito breed in fresh (Cafferata *et al.*, 2013) water and during monsoon water gets stored in various waste and thrown away items in the garbage, canals and ponds and thus creates pollution in the adjoining areas in Kolkata. Throwing away the garbage in the canals (Kumaran *et al.*, 2018) where the fresh water of rains gets stored.

Theoritical Understanding

In this research the author tries to explain the theoretical approach towards his study. In the study on the public health problem caused by Dengue in the Kolkata the capital city of West Bengal, country India. The researcher used the 'Labeling Theory' to explain and understand the link between the

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theoritical approach with this study on public health problem caused by Dengue.

The labeling theory have a very unique kind of approach towards the society where it explains the distinctively sociological approach on the role of social labeling in the society.

The labeling theory assumes that and defines that the deviant behaviour of an individual can evolve from any kind of human action. This action of individual vary with the circumstances surrounding the individual concern.

In this study on Dengue and related public health in Kolkata, the labeling theory approach is used to understand the stereotype used by the patients family and the neighbours living in the neighbourhood to understand the KAP (Knowledge, Attitude and practice) related to Dengue in Kolkata.

Here whenever an individual is lebeled, he/she often faces a new kind of problem related to his/her deviance. He/she often stigmatized and left alone, separated from the fellow member of the family, friend and neighbour in the neighbourhood.

In this same way the researcher draws the relation between the patients suffering from Dengue is often segregated and separated and put alone in the mosquito net in a room as it is believed that when ever a mosquito bites an individual and thus infected him/her with Dengue, and again when the mosquito bites or sits on the patients suffering from Dengue carries the germ to other member of the house and in the neighbours in the neighbourhood.

Whereas in the cultural framework only a small portion is constituted by the social lebel where the general people used to define and then categorize the social world. Here the lebels are quite important as they are stigmatized and used as markers.

When ever the lebels have been stigmatized, which actually means that the mainstream culture must have associated some negative image and thought to it.

In the mainstream culture the negative stereotypes are manifested in various ways.Just for example in the everyday language, mass media, books as well as film.

Whereas the social environment defined and typified the individual and lebels him or her, here the questioned answered the ways the individual lebeling occurs on the individual.

In case of formal labeling a subsequent individual development occurs which actually triggers lebeling and stigmatization in the everyday social settings. For example if a person suffering from Dengue in a house kept secret among the same house and not forecasted outside the house may in the neighbourhood or community or in society then there would have no impact on the individual, whereas if the story of Dengue infection is some how leaked in the neighbourhood or in community or in society then there is negative impact on the individual who was actually suffering from individual, he/she may be triggered exclusionary reactions from teachers and community people.

Objective

To find out and compare and contrast the spread of Dengue in ward 14 and ward 26 due to pollution in the two canal of Beliaghata and Bagjola in India, the capital city of Kolkata.

Methodology

The researcher followed both qualitative and quantitative method while doing his research in the urban parts in Kolkata, in the state of West Bengal country India. The researcher randomly sampled the areas of ward 14 and wards 26 and collected the primary data, and analysed the same data with the help of Microsoft Excel Software.

Results

Figure 1: The researcher asked the respondent the question that how much satisfaction they have from the KMC (Kolkata Municipal Corporation) in cleaning the canal.

The answer portrays that 90% of the respondent agreed that the pollution in the canals caused the spread of Dengue in ward 14.

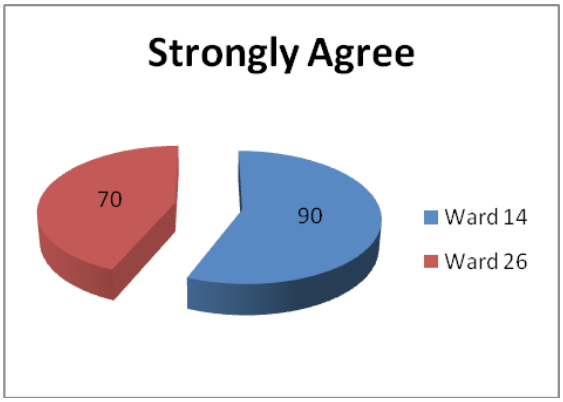

Fig. 1. Showing the percentage of pollution in Ward 14 and Ward 26

In ward 26, 70% of the respondent agreed that the pollution in the canal caused by throwing plastic cups, coconut shell, spread Dengue.

Conclusion

In the concluding section the author would like to explain the condition in both the canals portrays that the pollution caused by throwing unwanted plastic plates, cups, cans, garbage in the open canals causes pollution in the canals in Kolkata. Thus pollution with unwanted material in the canal often clogs water and stored fresh water in those plastic cups and coconut shell during monsoon which spread Dengue.

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