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# Impact of Lockdown on Dengue in Kolkata: A Socio-Ecological Study

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## **ABSTRACT**

The research was done in Kolkata, the capital city of West Bengal in the country India. In this paper the researcher tried to compare the KAP (Knowledge, Attitude and Practice) score on Dengue in Kolkata. The researcher collected the primary data from two ward 14 and ward 24 in Kolkata and tried to compare the data on the basis of education on Dengue among the participants in both these wards. Both quantitative and qualitative data were analysed in Microsoft Excel software. The result showed that more people were affected in ward 14 than in ward 24 in Kolkata.

Key words: Dengue, Attitude, Knowledge, Lockdown, Practice.

# Introduction

The Dengue spread like epidemic in India (Dash *et al.*, 2021) during 2018 – 2020. This disease is very common in tropical and subtropical part of the country. During the year 2020 when the world was facing the pandemic of COVID 19, in India (Phadke *et al.*, 2021) it was not only COVID 19 (Brady and Wilder-Smith, 1908) but the country was also facing the epidemic of DENGUE in various part of the country India. So here in India the twin effect of both COVID 19 AND DENGUE (Ong *et al.*, 2021) creating a havoc danger on the onset of monsoon in the state of West Bengal.

# Impact of the Lockdown on Dengue

It was seen the during the Lock down in Kolkata the Dengue increased rapidly (Cavany *et al.*, n.d.). One most important reason was that the infected Dengue patients stayed almost always with all the family members in the same small room and hence became more and more contagious, as the mosquito which

sits on the infected Dengue patients often sits on other members of the family and thus transmit the Disease in the same family where multiple number of people seen infected at the same time (Hilmy *et al.*, 2021). This was because due to Lockdown the government protocol of Covid 19 pandemic was to say home not to gather and move out of the house.

# Objective

To find out the KAP (Knowledge, Attitude and Practice) regarding Dengue amongst the people living in the ward 14 and ward 24 in Kolkata

# Methodology

The researcher while doing this research on DEN-GUE adopted a mixed method of both Quantitative and Qualitative method. The researcher randomly sampled the respondent from both ward 14 and ward 24. Data analysis was done with the help of Microsoft Excel Software.

#### **Results**

In Figure 1 the researcher asked the respondent the question that Dengue is a serious illness which can take life?

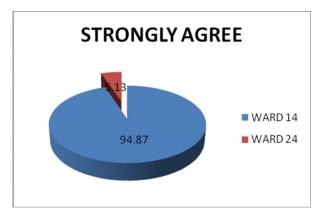
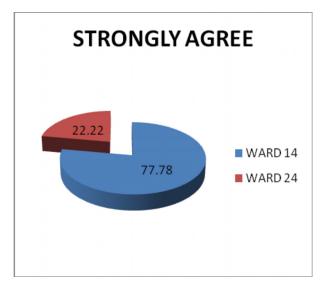


Fig. 1. Dengue is serious illness which can take life

The answer portrays that 94.87 percent belonging to ward 14, agreed while 5.13 percent of respondent belonging to ward 24 agreed.

In Figure 2 the researcher asked the respondent the question that. Do you feel that you are getting a risk of Dengue?



**Fig. 2.** Do you feel that you are getting a risk of Den gue

The answer portrays that about 77.78 percent respondents from the ward 14 strongly agreed with the question and 22.22 percent from ward 24 agreed.

This was due to the unhealthy conditions surround-

ing their homes. Mainly the vegetations and the canal which carries all the plastic cups and plastic containers which holds water during the monsoon every year, all these reasons coupled with lack of proper cleaning program undertaken by the local agencies and Kolkata Municipal Corporation.

In Figure 3 the researcher asked the respondent the question that. Do you feel that Dengue fever can be prevented?

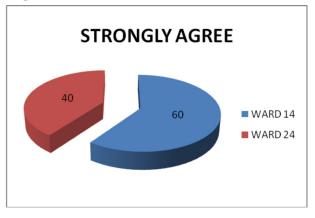


Fig. 3. Do you feel that Dengue fever can be pre vented

The answer portrays that 60 percent of the respondents belonging to ward 14 strongly agreed that Dengue can be prevented. While the 40 percent said that they also strongly agree that the Dengue can be prevented from ward 24.

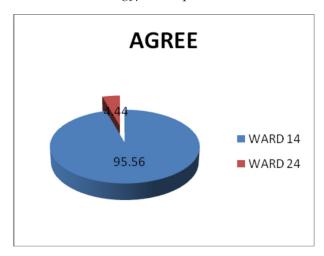
In Figure 4 the researcher asked the respondent the question that. Do you feel that more awareness program is needed to prevent Dengue?



**Fig. 4.** Do you feel that more awareness program is needed to prevent Dengue

The answer portrays that about 88.24 percent respondent from ward 14 agreed that more awareness program is needed on Dengue, corresponding to 11.76 percent of the respondent belonging to ward 24 agreed on the same awareness program needed to eradicate Dengue in these two ward in Kolkata.

In Figure 5 the researcher asked the respondent the question that. Do you feel that KMC (Kolkata Municipal Corporation) should use bleaching powder even if it does not have any impact on Dengue nor it kills *Aedes aegypti* mosquito?



**Fig. 5.** Do you feel that KMC (Kolkata Municipal Corporation) should use bleaching powder even if it does not have any impact on Dengue nor it kills Aedes Aegypti mosquito.

The answer portrays that about 95.56 percent of respondents belonging to ward 14 agreed that the KMC should use the bleaching powder, while only 4.44 percent of respondent agreed from the ward 24, that even if the bleaching powder does not kill the *Aedes aegypti* mosquito then also KMC should use it for the proper cleanliness and safety from diseases in these two ward.

# Conclusion

In the concluding section the author would like to give importance on the period of lockdown in Kolkata, where the rise of Dengue along with Covid 19 was at an alarming rate. Many respondents from both the ward 14 and ward 24 complained that during the lockdown in Kolkata, the KMC workers were not seen working and cleaning. As many of the workers who went to their homes during lockdown some in this state of West Bengal and some in the neighboring states of Bihar and Jharkhand in the country India.

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