



Importance and Need of Medical Entomology and Medical Entomologist in Public Health

Introduction

Entomology is a science that deals with the study of arthropods, and included the other sciences like zoology, biology, parasitology and micro-biology. Medical Entomology is a branch of entomology which deals with arthropods which affect the health and well-being of man and vertebrate animals. In other words, medical/veterinary entomology is the medical science directly concerned with vectors that affect human and animal health. Other branches of entomology are also available. They are Industrial Entomology/Economical Entomology: deals with industrially or economically important arthropods (industrial pests). Agricultural Entomology deals with the pest science dealing with arthropods that affect plants and animals. Medical Entomology (ME) is an important subject in both medical and public health education. [1] It is very much useful in better understanding in the research of vector-borne infectious diseases in field and in the medical teaching and research also. [2, 3] Most of the very recent medical entomology related discoveries have yet to be translated in major control approaches in the vector borne public health problems and it gives modern technology, track the problem and find out the direct solutions. [4]

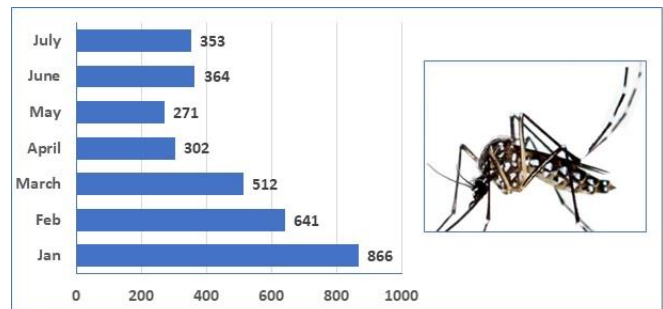
Medical Entomology in Public Health

ME is also very much useful in the develop of vaccines and to prevent human community from insects and arthropod vectors transmit diseases. Iglisch I [5] had mentioned elaborately about the significance of entomology in the area of public health very clearly. Public Health Entomology (PHE) program at Purdue University how it is aimed to reducing VBD by using some method and public education. [6] PHE deals on population biology of VBD, understanding of pathogens perpetuate over time and to reduce the burden in human beings' health. Spielman [7] had explained in his article very clearly about the issues in public health entomology.

Medical Entomologist in Public Health

Medical Entomologist need and their works are very much essential in public health. So many VBD and other diseases out breaks are happening in various occasions/seasons in regions/states/countries. In the year 2022, there was 6,430 dengue cases reported and 8 persons died. In 2023, the state Tamil Nadu reported 4,048 dengue cases in the past 8 months 15 days [8] as show in the following **Figure – 1**. Medical entomologists are dedicated to eliminating vector-borne diseases by surveying and managing the insects and other arthropods that cause them. That's why, the need of medical entomologists is very important to the world. [9]


Figure – 1 Distribution of monthly dengue cases in Tamilnadu in 2023



Conclusion

From this, I have concluded that medical entomology is an essential and important one in public health. So, government has to implement medical entomology as one of the subjects in school and college levels curriculum. Medical Entomologists are doing their great job and they are helped to vaccine development, public,

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government and policy makers. Furthermore, studies are needed to find the importance of medical entomology and entomologist to the community.

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