

Mosquito Home System: A Case Study of Practical Model to Fight Aedes in Kedah, Malaysia

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ABSTRACT

INTRODUCTION: Dengue is a vector borne disease transmitted by Aedes mosquito. Preventing or reducing the virus transmission depends entirely on controlling the mosquito vectors. Transmission control activities should target Aedes in its immature stages (egg, larva and pupa) and adult stages in the household and immediate vicinity. This paper presents an alternative mechanism of combating this global disease by using an auto dissemination trap, called Mosquito Home System (MHS). **METHODS:** MHS is equipped with a special trade secret solution that is called as Insecticide Growth Regulator (IGR) is non-toxic, has a pheromone-like liquid formulation that is a chemical that serves to stimulate and have sexually attract the male and female that will attract and lure female mosquitoes to lay eggs in them, and will soon die after laying eggs. Those eggs that already laid with the chemical will not hatch or die at an expected 99% rate or go beyond the pulp level. This liquid prevents the food for the larvae into the water and in turn will kill the larvae. Once it lays eggs in the MHS, it kills the larvae and pulp in the new breeding ground. **RESULTS:** Data taken from October 2018 to April 2019 in Taman Ria, Sungai Petani, Kedah, Malaysia reveals that the decrease percentage of 82% on overall total number of Aedes eggs collected through MHS pots installed in that area. **DISCUSSION:** The MHS implementation in controlling dengue disease caused by Aedes mosquito could be enforced to the national and international level community.

KEYWORDS: Aedes mosquito, Mosquito Home System (MHS), fogging, Insecticide Growth Regulator (IGR), Aedes egg, pheromone

MRSA Outbreak at a Massage Parlour in Kuala Lumpur, 2019

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ABSTRACT

INTRODUCTION: On 30 January 2019, Lembah Pantai Health Office (LPHO) received a notification on positive MRSA cases among customers at a massage parlour in Kuala Lumpur. Investigations were commenced with objectives to establish the outbreak existence, to determine the epidemiological characteristics and to identify source of infection. **METHODS:** Investigation was focused on cases, environmental and laboratory investigation. All notified cases, employees (masseur) and the owner were investigated through phone or face to face interview. Environmental investigation and sample were taken to look for possible source of infection. Hand and nasal swab were taken from all available employees during investigation. **RESULTS:** Eleven customers were diagnosed to be positive MRSA with history of having foot massaged in the premise from Jun 2018. The first onset was on 19 Jun 2018, with symptoms of rashes with pus discharge and inflammation over their shin. All of them had seek treatment with eight being admitted at various private hospitals and diagnosed through laboratory investigations. Nasal swab from one-woman employee also positive for MRSA. Environmental investigation showed the massage area was crowded with chairs attach to each other and made from fabric. **DISCUSSION:** MRSA can be transmitted to other person through direct skin to skin contact or contacts with shared items or surfaces. As in this outbreak, the source of infection was believed to be from the masseur as a carrier. Prevention and control measures were already taken for both, the carrier and the premise.

KEYWORDS: MRSA, MRSA outbreak, massage parlour