



**THE SUSTAINABILITY OF COMMUNICATION OF BEHAVIORAL  
IMPACT (COMBI) PROGRAM IN PREVENTING AND CONTROLLING  
DENGUE FEVER IN KAMPUNG BATANG MERBAU, TANAH MERAH,  
KELANTAN**

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## ABBREVIATIONS

<b>AI</b>	Aedes Index
<b>BI</b>	Breteau Index
<b>CI</b>	Confidence Interval
<b>COMBI</b>	Communication of Behavioral Impact
<b>DF</b>	Dengue Fever
<b>DHF</b>	Dengue Hemorrhagic Fever
<b>DHOTM</b>	District Health Office of Tanah Merah
<b>df</b>	Degree of Freedom
<b>KAP</b>	Knowledge, Attitude and Practice
<b>MOH</b>	Ministry of Health Malaysia
<b>SD</b>	Standard Deviation
<b>WHO</b>	World Health Organization

## ABSTRACT

**TITLE: THE SUSTAINABILITY OF COMMUNICATION OF BEHAVIORAL IMPACT (COMBI) PROGRAM IN PREVENTING AND CONTROLLING DENGUE FEVER IN KAMPUNG BATANG MERBAU, TANAH MERAH, KELANTAN**

### **Introduction:**

Dengue fever is one of the most important arthropod-borne viral diseases. No doubt that the COMBI program has shown its impact in reducing the prevalence of dengue fever in the affected community. However, the sustainability of the program is still questionable in ensuring the area remains free from the dengue outbreak.

### **Objective:**

To evaluate the sustainability of COMBI program towards prevention and control of dengue fever in Kampung Batang Merbau, Tanah Merah, Kelantan.

### **Methods:**

This study utilized a community intervention design. Residents of Kampung Batang Merbau were taken as the subjects. Sample size was determined by comparing the means between two groups of populations which were paired. A self-guided questionnaire was used. Ethical clearance was obtained prior to the start of the study. The comparison data, which was carried out prior to the start of COMBI program, was

obtained from the District Health Office of Tanah Merah. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 12.

**Results:**

One hundred and fifty residents participated in this study. The mean score of knowledge and practice were higher post COMBI program. Mean score of practice and understanding score of COMBI program was positively, directly, linearly and weakly correlated ( $p = 0.016$ ,  $r = 0.197$ ). No significant association between socio-demographic factors and understanding score of COMBI program.

**Conclusion:**

COMBI program was well sustained in preventing and controlling dengue outbreak in Kampung Batang Merbau up to eighteen months after the withdrawal of external support from Ministry of Health Malaysia.

**Keywords:**

Dengue fever; Social mobilization; COMBI; Vector control; Sustainability; Malaysia.

## ABSTRAK

**TAJUK: KELESTARIAN PROGRAM KOMUNIKASI UNTUK PERUBAHAN TINGKAH LAKU (COMBI) DALAM MENCEGAH DAN MENGAWAL DEMAM DENGGI DI KAMPUNG BATANG MERBAU, TANAH MERAH, KELANTAN**

### **Pengenalan:**

Demam denggi adalah salah satu penyakit yang disebabkan oleh virus. Tidak dinafikan bahawa program COMBI telah berjaya mengurangkan kes demam denggi. Walau bagaimanapun, kelestarian program dalam mencegah wabak denggi ini masih menjadi persoalan.

### **Objektif:**

Matlamat kajian adalah untuk menilai kelestarian program COMBI dalam mencegah dan mengawal demam denggi di Kampung Batang Merbau, Tanah Merah, Kelantan.

### **Metodologi:**

Kajian ini menggunakan kaedah intervensi komuniti. Penduduk Kampung Batang Merbau diambil sebagai subjek kajian. Saiz sampel ditentukan dengan membandingkan perbezaan min antara dua kumpulan yang telah dipadankan. Borang soal-selidik telah digunakan di dalam kajian ini. Kebenaran daripada Jawatankuasa Etika USM telah diperolehi sebelum kajian bermula. Data sebelum program COMBI

telah diperolehi dari Pejabat Kesihatan Daerah Tanah Merah untuk dibandingkan dengan data kajian. Data telah dianalisa dengan menggunakan “Statistical Package for Social Sciences” (SPSS) versi 12.

**Keputusan:**

Seramai seratus lima puluh orang terlibat di dalam kajian ini. Min pengetahuan dan sikap adalah lebih tinggi selepas program COMBI dijalankan. Terdapat hubungan yang linear serta positif antara amalan dan pemahaman tentang program COMBI ( $p = 0.016$ ,  $r = 0.197$ ). Walau bagaimanapun, tidak terdapat sebarang hubungan antara faktor-faktor demografik sosial dengan pemahaman tentang program COMBI.

**Kesimpulan:**

Kelestarian program COMBI dalam mencegah dan mengawal wabak denggi adalah terbukti sehingga lapan belas bulan selepas bantuan daripada Kementerian Kesihatan Malaysia ditamatkan.