

CHAPTER I

INTRODUCTION

The global pandemic of dengue fever began soon after World War II and since then there has been a dramatic increase in the incidence of dengue and its severe forms, such as Dengue haemorrhagic fever (DHF) and dengue syndrome (DSS). Globally, more than 2.5 billion people are at risk of infection in over 100 countries. Morbidity accounts for tens of million of cases with at least five hundred thousand cases of DHF having a mortality of about 5 percent. As the vast majority (95%) of cases comprises children below 15 years of age, it present a major public problem in dengue-endemic countries. Dengue hit the Philippines and Thailand in epidemic form in 1950 and later spread to other countries of Western Pacific and The South- East Asia regions. Over the past 15 to 20 year, DHF has become a leading cause of hospitalisation and death among children, and the Incidence is not only showing an increase trend but is also spreading geographically (WHO, 1999). In Thailand, Dengue Haemorrhagic Fever (DHF) was reported in 1958. Since then the disease has continuously spread to different areas of the country and has become a major public health problem. Recently the Ministry of Public Health (MOPH) of Thailand released data from January 1, 2001 until March 31, 2001, in which 10,211 DF/DHF cases were reported out of which 15 deaths. Most of the dengue cases were found in the provinces of: Patumtanee, Ratchaburi, Yala, Nakornpatom, Chonburi, Samutsakorn, Samutprakan, Rayong, Nakornsawan, and Bangkok. (MOPH, 2000)

The Essay (chapter II) is a review of the literature on dengue fever and dengue haemorrhagic fever and describes the biology, ecology and transmission dynamic of the *Aedes aegypti* mosquito, as well as the symptoms and treatment for DF/DHF. Furthermore the essay describes in detail the problems, the cause and consequences of DF/DHF and supportive evidence. The DF/DHF situation in Thailand and in Surin is also described, together with preventive and control measures. The strategy used in this study of community participation through a women group to change behavior associated with high *Aedes aegypti* larval indices in order to increase the success and sustainability of the program is explored.

The proposal (chapter III) gives an overview of the rationale, the theory and research methodology used in this study and describes in detail the design and implementation of the intervention, the study area, the study population, program monitoring, program evaluation, budget and activity plan.

The data exercise (chapter IV) describes the purpose and objective for the survey in Koksad village, Prasat district, Surin province in Thailand; the survey research method used for the baseline questionnaire (KAP) and the larval density form. It also provides a summary and a discussion of the results of the baseline questionnaire, the larval density survey and the interview of key informants.

The presentation (chapter V) consists of information, which was presented during the thesis examination to the committee. The appendices and the annotated bibliography are enclosed after this chapter. Finally, it is hoped that the findings of this study will be useful in the field of public health and provide ideas to deal with dengue fever and dengue hemorrhagic fever.