

## CHAPTER V

### PRESENTATION



## Thesis Title

Education of women as a strategy in the control

Of

Dengue Fever in Surin.

## Why is DHF is a problem!

- Globally, more than 2.5 Billion people are at risk of DH/DHF infection in over 100 countries.
- Morbidity accounts for tens of million of case with at least five hundred thousand cases of DHF having a mortality of about 5 percent.
- The vast majority (95%) of cases comprises children below 15 years of age

**In Thailand(2000), Total dengue case 15,977 cases.**

- **Death 29 cases, ^**
- **Morbidity rate 25.91 per 100,000 population**
- **Mortality rate 0.05 per 100,000 population**
- **Case Fatality Rate 0.18 percentages**
- **In Thailand (Jan,1,2001-March,31,2001) 10,211 DF/DHF cases , Death 15 cases**

**Dengue situation in Thailand (1998-2000)**

Year	Dengue cases	Morbidity/1000,000 Population	Case fatality rate (%)
1998	129,954	211.42	0.00
1999	24,826	40.39	0.22
2000	15,977	25.91	0.18

Source: Division of Dengue Fever ,MOPH ,Thailand,2000

**DF/DHF situation in Surin province, Thailand  
(Jan 1, 1998-Dec31,1998)**

- Dengue cases was 3533 cases
- Morbidity rate 258.52 per 100,000 population
- Death 2 cases
- Case fatality rate 0.06%

In koksaad village(2000) There were 5 cases of DHF,  
no death

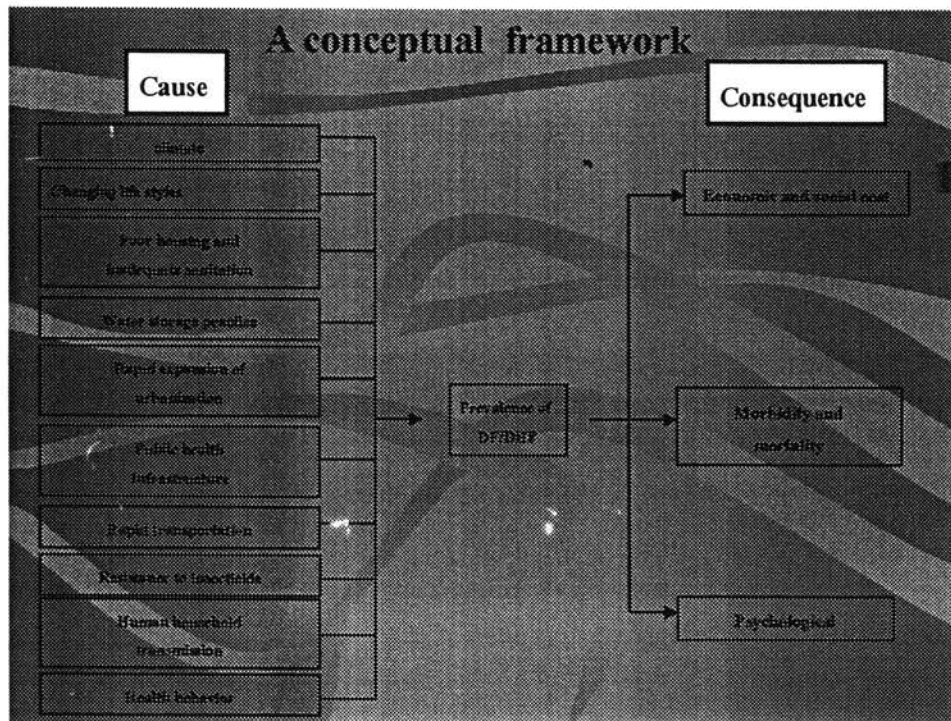
**Dengue situation in Surin ,2000**

Year	Morbidity rate	Mortality rate	Case fatality rate
1997	184.69	0	0
1998	258.32	0.15	0.06
1999	19.75	0.22	0.10
2000	3.40	0	0

Source: Department of Public Health Surin,( data as 14 July 2000)

## What could be done

- Source reduction by cover water containers, remove of rubbish, temephos sand granules placed in water containers, put larvivorous fish in water container
- spray with insecticide, used ovitrap using mosquito coils, mosquito net, repellents, screen in windows and doors



## Proposal

### Proposed intervention

Participatory Learning program in women:  
An intervention to reduce the mortality and morbidity of DF/DHF in koksaaad village Surin province ,Thailand

## General objective

To assess the level of knowledge of DHF/DF and the level of community participation through a participatory learning program applied to a women group in order to reduce the mortality and morbidity of DF/DHF in the community

## Specific objective

- To increase the knowledge and awareness of DF/DHF in women
- To compare the level of the community participation before and after the program
- To reduce the larval density in order to decrease the mortality and morbidity of DF/DHF
- To encourage the women in the community to participate in the control of DF/DHF

## Operational Definitions

The Dengue prevention and control behaviors

means sleep in the nets, eliminating mosquito

breeding breeding places by cleaning and closing

water containers, putting abate sand or laryvorous

fish into water containers, cleaning house and the

environment.

### Participatory learning program means

The learning process by discussion and exchanging knowledge and opinion among learners.

They can identify their problems, analyze the problems, practicing and developing problem solving method.

Empowerment means to help people to develop the ability and knowledge to take decision on matters relating themselves.



## Study designs

Pre-experimental design( one group pretest and post test design)

### Instrument

- Interview questionnaire
- Indept interview
- Larval density Survey

### The program evaluation

1. Evaluating the participatory learning workshop
2. Evaluating the educational out put

## Budget

Budget category	Unit price (Baht)	Unit s	Duration (days)	Total amount (Baht)
<b>1. Personnel</b>				<b>51,000</b>
1.1 researcher	30,000	1		30,000
1.2 assistant facilitator	5,000	3		15,000
1.3 participants	500	12		6,000
<b>2. Transport</b>				<b>6,800</b>
2.1 fuel	100	1	5	800
2.2 vehicle rent	750	1	8	6,000
<b>3. Stationary</b>				<b>1,150</b>
3.1 stationary workshop	500	1	2	1,000
3.2 computer diskettes	30	5		150
<b>4. Dissemination of results</b>				<b>1,300</b>
4.1 meeting to disseminate results	200	5		1,000
4.2 photocopies	1	600		600
<b>5. Miscellaneous</b>				<b>4,000</b>
5.1 other supplies (food, etc.)	3,000			3,000
5.2 reserve	1,000			1,000
<b>Total budget :</b>				<b>24,150</b>

## Activity plan

Activity	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Discussion with MoPH Surin	X	X										
Literature review	X											
Submit proposal		X										
Program proposal			X									
- formation of research team			X									
- preparation of material			X									
- coordination with P.H. Dept. & community leaders			X									
- training of ass. Facilitators			X									
Pre-test questionnaires				X								
Participatory Learning workshop				X								
Post-test questionnaires				X								
Evaluation				X			X			X		
Data analysis							X			X		
Report writing											X	X
Conclusion												X

## Data Exercise

### Objective

- To identify and collect detail information from women,
- To obtain information on knowledge, attitude and practices related to dengue, dengue transmission and prevention
- To determine the larval densities of *Aedes Aegypti* mosquitoes

## Research methodology

### Cross sectional Survey

The target population were 325 women.

The sample size were 60 women.

The study area were Koksaad village koksaad subdistric,  
Prasai district, Surin province, Thailand

### Sampling technique

Simple random sampling

### Instrument

- interview questionnaires
- indept- interview with key informant
- Larval density servey

## Result-KAP questionnaire

85% were married

85% were farmer

75% were primary school

11.7% were illiterate

Monthly family income rang from 500-2000 baht

### Level of Knowledge related to dengue fever

Level of knowledge	Number	Percentage
High ( $\geq \bar{X} + S.D.$ )	10	16.7
Moderate ( $= \bar{X} \pm S.D.$ )	37	61.7
Low ( $\leq \bar{X} - S.D.$ )	13	21.7
Total	60	100

$\bar{X} = 15.48$ ,  $S.D.=3.40$

### Level of Attitude about Dengue fever

Level of attitude	Number	Percentage
Good ( $> \bar{X} + S.D.$ )	8	13.3
Moderate ( $= \bar{X} \pm S.D.$ )	37	61.7
Low ( $\leq \bar{X} - S.D.$ )	15	25
Total	60	100

$\bar{X} = 31.33$ ,  $S.D.=4.12$  Min=23, Max=39

**Level of practice or participation in prevention  
And control of Dengue fever**

Level of Practice	Number	Percentage
Good ( $> \bar{X} + S.D.$ )	11	18.3
Moderate ( $= \bar{X} \pm S.D.$ )	40	66.7
Low ( $\leq \bar{X} - S.D.$ )	9	15
Total	60	100

$\bar{X} = 32.78$ ,  $S.D.=5.89$  Min=19 , Max =42

**Result of larval density survey in Koksaaad village**

Number of houses inspect = 60 houses

Number of houses infested = 49 houses

Number of containers inspect = 439 containers

Number of positive containers = 109 containers

House Index(HI) = 81.6

Breteau Index(BI) = 181.6

## Discussion

Women do have sufficient knowledge about prevention and control of dengue fever but not change their behavior( low participation).

The finding from larval density survey Could be interpreted as high risk having Dengue fever in the community.

## Lesson learned

The interviewer need to have some communication technique.

The team conducting the larval density survey was the same as doing the interviews.

In the future should be use 2 teams in order to save time.

The questionnaire was too long, need to develop good instrument.

