

# Effect of nutritional and hand-hygiene educational programs on maternal anaemia and foetal birth weight

<b>Submission date</b> 10/05/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 27/05/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 27/05/2010	<b>Condition category</b> Pregnancy and Childbirth	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Mr Phnom Sukchan

### Contact details

Epidemiology Unit  
Faculty of Medicine  
Prince of Songkla University  
Hat Yai  
Songkhla  
Thailand  
90112

## Additional identifiers

### Protocol serial number

EC 50/354-012

## Study information

### Scientific Title

The effectiveness of nutritional and hand-hygiene educational programs on maternal anaemia and foetal birth weight in southern Thailand: a randomised controlled trial

### **Study objectives**

1. Nutritional and/or hand-hygiene programs can reduce the anaemia in pregnant women and improve foetal birth weight at delivery in soil-transmitted helminth (STH) endemic area.
2. Hand-hygiene program has synergistic effect to nutritional program to reduce anaemia in pregnant women and improve foetal birth weight in soil-transmitted helminth (STH) endemic area.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Ethics approval was obtained from the Ethics Committee of Faculty of Medicine, Prince of Songkla University, Songkhla, Thailand (reference no. EC 50/354-012), Ethic Committee of Ministry of Public Health (reference no. 9/2008)

### **Study design**

Randomised controlled trial

### **Primary study design**

Interventional

### **Study type(s)**

Prevention

### **Health condition(s) or problem(s) studied**

STH infestation, maternal anaemia, foetal birth weight

### **Interventions**

1. Control: without any intervention

This group will not expose to any interventions and will receive normal routine standard of ANC.

2. Intervention 1: nutritional program

The 15 minutes flipchart on nutritional knowledge and practice consisted of four topics:

- 2.1. Importance of nutrition for mother and their foetus
- 2.2. Affect of malnutrition and further health problems
- 2.3. Kinds of food and adequate quantity for mother
- 2.4. Appropriate methods to choose and prepare food for cooking.

2. Intervention 2: hand hygiene program

The 15 minutes flipchart on hand-hygiene knowledge and practice consisted of four topics:

- 3.1. Epidemiology of STH and the effects on mother and baby
- 3.2. Important route of transmission
- 3.3. Important of hand hygiene for personal health and STH transmission
- 3.4. Correct methods of hand washing

4. Intervention 3: nutritional plus with hand hygiene program

The 30 minutes flipchart on nutritional and hand-hygiene knowledge

### **Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

1. Maternal anaemia, defined as haemoglobin <11g/dL (WHO criteria), measured at recruitment (12-20 weeks) and 32 weeks of gestation.
2. Foetal birth weight

**Key secondary outcome(s)**

STH infestation:

Binary outcome is infested or not infested. If infested then the intensity and type of helminths is measured at recruitment( 12-20weeks) and 3 month after recruitment.

**Completion date**

31/12/2009

**Eligibility****Key inclusion criteria**

All pregnant women with a gestational age of twelve to twenty weeks, who had lived in Narathiwat province for at least one year and were attending the antenatal clinic in four of the study hospitals at first visit.

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

Female

**Key exclusion criteria**

1. High-risk pregnancies such as severe anaemia of less than seven gm/dl
2. Heart disease
3. HIV positive/AIDS
4. Any mental problems

**Date of first enrolment**

01/01/2008

**Date of final enrolment**

31/12/2009

**Locations**

**Countries of recruitment**

Thailand

**Study participating centre****Epidemiology Unit**

Songkhla

Thailand

90112

## **Sponsor information**

**Organisation**

Prince of Songkla University (Thailand)

**ROR**

<https://ror.org/0575ycz84>

## **Funder(s)**

**Funder type**

Research organisation

**Funder Name**

Institute of Research and Development for Health of Southern Thailand (Thailand)

## **Results and Publications**

**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration