

# Improving antenatal care (ANC) utilization through a low cost community intervention among pregnant women in rural villages in Laos

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<b>Registration date</b> 20/09/2011	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 31/07/2014	<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

### Background and study aims

Maternal mortality ratio (MMR) is the number of women who die during pregnancy and childbirth, per 100,000 live births. The MMR in Laos is one of the highest in the South East Asia region. Even though it has made substantial progress in the past 20 years, it is unlikely to achieve the target for the fifth Millennium Development Goal because antenatal care (ANC) utilization is quite low. Our previous study among rural villages in two provinces has shown that the women would be willing to attend the ANC services if they thought it was useful, and we have also found that quality of ANC services at health centres in rural Laos was restricted by lack of basic examination equipment and non-standardized ANC performance of healthcare providers. The aim of this study was to promote awareness among pregnant women about the usefulness of utilizing ANC services, such as consulting the healthcare providers in the first trimester of pregnancy or as soon as they believed they were pregnant, and attending ANC at least four times during a normal pregnancy.

### Who can participate?

Pregnant women with gestational age more than 32 weeks and women who gave birth 6-12 months ago will be interviewed before and after the intervention.

### What does the study involve?

The intervention has three components:

1. Community participation to promote ANC use: all people in the selected villages will be invited to meetings with the aim to raise awareness and promote utilization of ANC at the health centre level.
2. Provision of basic ANC equipment to intervention health centres.
3. Refresher courses on providing ANC services for healthcare providers at the health centres.

### What are the possible benefits and risks of participating?

All participants would know where to seek for help when the pregnant women in their families

have problems. The pregnant women are expected to utilise the ANC services to a higher extent for routine controls and for assessment and treatment of any pregnancy-related problems, which would result in healthy mothers and babies. There are no known risks to participants.

Where is the study run from?

The study took place in two provinces in Laos.

When is the study starting and how long is it expected to run for?

The pre-intervention survey took place in June 2008, and the intervention started in June 2010.

The study ended 9 months from the start of the intervention.

Who is funding the study?

The Swedish International Development Cooperation Agency (Sida) and the Swedish Institute (SI).

Who is the main contact?

Associate professor Rolf Wahlström  
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## Contact information

### Type(s)

Scientific

### Contact name

Prof Rolf Wahlström

### Contact details

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## Additional identifiers

### Protocol serial number

UTRN: U1111-1123-9693

## Study information

Scientific Title

Improving antenatal care utilization through a low cost community intervention which includes community participation combined with the provision of basic ANC equipment to health centers and a refresher course for healthcare providers: a pragmatic randomized trial in two provinces in rural Laos People's Democratic Republic

### **Study objectives**

1. The overall ANC use should increase by 15% in the intervention arm compared to the control arm
2. Similar increases would be seen in the proportion of pregnant women visiting ANC at health centres four times or more

### **Ethics approval required**

Old ethics approval format

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

National Ethics Committee for Health Research, Ministry of Health, Vientiane, Laos People's Democratic Republic, 30/04/2008, ref: 174/NECHR

### **Primary study design**

Interventional

### **Study design**

Randomized non-blinded parallel-group controlled two-arm trial

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

Quality of life

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

Promotion of maternal and neonatal health

### **Interventions**

1. Community participation to promote ANC use:
  - 1.1. Sequential village meetings organized by important village representatives, such as the head of the village, the head of the Lao Womens Union, and the village health volunteers
  - 1.2. Target for the community participation where all people in the villages such as: men and women with different characteristics, such as married, unmarried, young and old.
  - 1.3. Meetings to focus on the usefulness of antenatal care and the promotion of ANC utilisation at nearest health centre
2. Provision of basic ANC equipments to intervention health centres: each health centre in the intervention site was supplied with:
  - 2.1. Sphygmomanometer
  - 2.2. Stethoscope
  - 2.3. Fetoscope
  - 2.4. Urine test kits
  - 2.5. Tape measure
  - 2.6. Weighing scale
  - 2.7. Cloth to cover the abdomen
  - 2.8. ANC manual including a procedure checklist
  - 2.9. Poster showing the usefulness of attending ANC and pregnancy record booklets for women
3. Refresher courses for healthcare providers at the health centres:

- 3.1. Review the importance of ANC provision
- 3.2. Focused ANC
- 3.3. Basic prevention and simple treatment for certain pregnancy complications (including the provision of iron tablets, tetanus vaccine, anti-parasite treatment and human immunodeficiency virus [HIV] information)
- 3.4. How to record the status at each visit
- 3.5. Using the ANC record booklet for pregnant women
- 3.6. Explanation of the ANC posters to carers

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

Difference in overall ANC use as reported by the interviewed women and checked with the ANC record booklet

**Key secondary outcome(s)**

1. Difference in the proportions of women making at least the recommended four ANC visits, as reported by the women and checked with the ANC record booklet
2. Difference in the proportion of women making their visits at health centres, as reported by the women and checked with the ANC record booklet

**Completion date**

31/03/2011

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

Two provinces were selected and in each two districts were selected based on information from provincial health directors according to the study groups criteria:

1. Geographically separate and with different economic standards
2. Ten villages were then randomly selected from each district: five with health centers and five without health centers but within their respective catchment area
3. The respondents are the women aged 15-49 years who were currently pregnant at the time of the pre-intervention and post-intervention interviews, respectively, with a reported gestational length of 32 weeks or more, or who had recently given birth (during the last year for the pre-intervention survey, and during the last six months for the post-intervention survey)

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

Female

**Key exclusion criteria**

Does not meet inclusion criteria

**Date of first enrolment**

01/06/2008

**Date of final enrolment**

31/03/2011

**Locations****Countries of recruitment**

Lao People's Democratic Republic

Sweden

**Study participating centre**

Karolinska Institutet

Stockholm

Sweden

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**Sponsor information****Organisation**

Swedish Agency for International Development Cooperation (Sida) / Department for Research Cooperation (SAREC) (Sweden)

**ROR**

<https://ror.org/01fn7me06>

**Funder(s)****Funder type**

Government

**Funder Name**

Swedish International Development Cooperation Agency (SIDA) (Sweden)

**Funder Name**

Swedish Institute (SI) (Sweden)

**Funder Name**

Ministry of Health of Laos People's Democratic Republic (Laos)

**Results and Publications****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration