

# Effectiveness of coconut oil in the control of pediculosis capitis in preschoolers in Acapulco, Guerrero, Mexico

<b>Submission date</b> 04/11/2016	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 08/11/2016	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 25/05/2017	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Pediculosis capitis, more commonly referred to as head lice, is a common problem among children in Acapulco, Mexico. Although not a life-threatening condition, a head lice infection can cause great distress through discomfort and the negative associations people have with head lice. Insecticides (chemicals which kill insects) are the most common treatment for head lice. The overuse of these chemicals has led to the development of lice which are resistant, and can survive even after the application of chemicals. In recent years, there have been many attempts to develop alternative treatments at a low cost. Acapulco has a nearby coastal strip where coconut palms are grown and from which oil can be extracted for different uses, such as for skin moisturisation and sunscreen. The aim of this study is to investigate the effectiveness of coconut oil as a treatment for head lice in children attending kindergartens in Acapulco.

### Who can participate?

Children attending a participating kindergarten aged between four and six years old.

### What does the study involve?

Participating kindergartens are randomly allocated to one of two groups. In kindergartens in the first group, children have 30ml coconut oil applied onto their scalp, which is repeated 10 days later. In kindergartens in the second group, children continue as normal and have no additional treatment applied. At the start of the study and then seven days after those in the first group have had their final application of coconut oil, in both groups, children's scalps are inspected for head lice.

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

Participants who receive the treatment benefit from receiving treatment free of charge that they would otherwise not have received. There are no risks associated with participating.

### Where is the study run from?

Eight schools in Acapulco (Mexico)

When is the study starting and how long is it expected to run for?  
July 2012 to August 2016

Who is funding the study?  
Universidad Autónoma de Guerrero (Mexico)

Who is the main contact?  
1. Dr Sergio Paredes-Solís (scientific)  
srgprds@gmail.com  
2. Mrs Janet Saldaña-Almazán (public)  
janetsaldana22@hotmail.com

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Sergio Paredes-Solís

**ORCID ID**  
<https://orcid.org/0000-0002-3015-3038>

**Contact details**  
Centro de Investigación de Enfermedades Tropicales  
Universidad Autónoma de Guerrero  
Calle Pino S/N  
Colonia El Roble  
Acapulco  
Mexico  
39640  
+52 74 49 09 46 82  
srgprds@gmail.com

**Type(s)**  
Scientific

**Contact name**  
Mrs Janet Saldaña-Almazán

**ORCID ID**  
<https://orcid.org/0000-0003-0039-6642>

**Contact details**  
Centro de Investigación de Enfermedades Tropicales  
Universidad Autónoma de Guerrero  
Calle Pino s/n  
Colonia El Roble  
Acapulco  
Mexico

39640  
+52 74 41 32 88 50  
janetsaldana22@hotmail.com

## **Additional identifiers**

**Protocol serial number**  
ECOPC-CIET-PT

## **Study information**

**Scientific Title**  
Effectiveness of coconut oil in the control of pediculosis capitis in preschoolers in Acapulco, Guerrero, Mexico: A pilot randomized controlled cluster trial

**Acronym**  
ECOPC-CIET-PT

**Study objectives**  
Coconut oil is effective as a topical treatment for pediculosis capitis in preschoolers.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Ethics Committee Research Center for Tropical Diseases at the Autonomous University of Guerrero, ref: 2015-005

**Study design**  
Cluster randomized controlled trial

**Primary study design**  
Interventional

**Study type(s)**  
Treatment

**Health condition(s) or problem(s) studied**  
Pediculosis capitis

**Interventions**  
Eight kindergarten's from zone 20 of the Ministry of Education of Guerrero, Acapulco city, are randomised to one of two groups using a computerised random number generator (www.random.org). At baseline, an initial measurement will be undertaken to estimate the prevalence of pediculosis capitis in each of the kindergartens. This involves a short questionnaire answered by the children's parents, the provision information about the study and provision of informed consent.

Intervention group: Following collection of the baseline measurement, students have 30 ml of coconut oil applied onto their scalp, which is repeated 10 days later.

Control group: Participants do not receive any treatment and continue as normal.

Follow up for all participants involves measuring the rate of pediculosis capitis infestation throughout direct inspection of the scalp at each kindergarten one week later of the last visit to the intervention schools (day 17)

### **Intervention Type**

Other

### **Primary outcome(s)**

Pediculosis capitis infestation rate in school children is measured by direct observation in eight areas of 2x2cm on the scalp of each student, at baseline and 17 days.

### **Key secondary outcome(s)**

Pediculosis capitis infestation level in school children is measured by direct observation in eight areas of 2x2cm on the scalp of each student, at baseline and 17 days.

### **Completion date**

27/05/2016

## **Eligibility**

### **Key inclusion criteria**

1. Children attending school the day of the survey
2. Age between four and six years

### **Participant type(s)**

Other

### **Healthy volunteers allowed**

No

### **Age group**

Child

### **Lower age limit**

4 years

### **Upper age limit**

6 years

### **Sex**

All

### **Key exclusion criteria**

Preschoolers with serious illnesses such as cancer, immune disease or disability.

### **Date of first enrolment**

25/01/2015

**Date of final enrolment**

15/03/2015

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

Mexico

**Study participating centre****Jose Antonio Adame School**

Paseo de la Cañada s/n

Colonia Alta Progreso

Acapulco

Mexico

39610

**Study participating centre****Educadora Guerrerense School**

Paseo de la comunidad s/n

Colonia Módulo Social Foviste

Acapulco

Mexico

39500

**Study participating centre****Teresa Gaminde School**

Campeche s/n

Colonia Progreso

Acapulco

Mexico

39350

**Study participating centre****2 de Febrero School**

Calle Libertad de Expresión s/n

Colonia Los Periodistas

Acapulco

Mexico

39613

**Study participating centre**

**Aaron M. Flores School**

Calle Paseo de la Cañada s/n  
Colonia Alta Progreso  
Acapulco  
Mexico  
39610

**Study participating centre****Rubén Darío School**

Calle 2 s/n  
Colonia Ampliación Palma Sola  
Acapulco  
Mexico  
39510

**Study participating centre****Vicente Guerrero School**

Avenida División del Norte s/n  
Colonia Francisco Villa  
Acapulco  
Mexico  
39610

**Study participating centre****Independencia de México School**

Avenida 16 de Septiembre s/n  
Colonia 13 de Junio  
Acapulco  
Mexico  
39350

## **Sponsor information**

**Organisation**

Universidad Autónoma de Guerrero

**ROR**

<https://ror.org/054tbkd46>

# Funder(s)

## Funder type

University/education

## Funder Name

Universidad Autónoma de Guerrero

# Results and Publications

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Lic. Janet Saldaña-Almazán (janetsaldana22@hotmail.com) or Dr. Sergio Paredes-Solís (srgprds@gmail.com)

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Basic results</a>		10/05/2017	25/05/2017	No	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes