# Effects of structured nutrition education on maternal perceptions, and exclusive breastfeeding duration in Kiandutu health centre, Thika - Kenya

| Submission date 02/02/2017          | <b>Recruitment status</b><br>No longer recruiting     | <ul> <li>Prospectively registered</li> <li>Protocol</li> </ul>        |
|-------------------------------------|---|---|
| <b>Registration date</b> 21/04/2017 | <b>Overall study status</b><br>Completed              | <ul> <li>[] Statistical analysis plan</li> <li>[X] Results</li> </ul> |
| Last Edited<br>06/06/2023           | <b>Condition category</b><br>Pregnancy and Childbirth | Individual participant data   |

#### Plain English summary of protocol

Background and study aims

Breastfeeding has been shown to be important for the health, nutrition and survival of children. This is especially the case in developing countries, where there are high rates of infectious diseases and a lack of good nutrition. Despite this, exclusive breastfeeding rates in Kenya are low, particularly in city slums. This study is looking at a personalized nutrition education program that encourages exclusive breast feeding (EBF) for the first six months and is tailored to improve mothers' breastfeeding self-efficacy. The aim of this study is to look at the effectiveness of this program at improving EBF rates and breast feeding self-efficiency.

Who can participate? Healthy pregnant women.

What does the study involve?

Participating villages are randomly allocated to one of two groups. Those in the first group take part in the education program. This involves listening to a talk at the health centre about the importance of a proper diet during pregnancy and while breast feeding, and information about the value of breastfeeding to children's health. Those in the second group continue as normal for the duration of the study. Participants in both groups are followed up twice during pregnancy and once a month after they have given birth for six months to find out how many women are exclusively breastfeeding their babies and their views about breastfeeding.

What are the possible benefits and risks of participating?

Participants who take part in the education program benefit from learning about the importance of a good diet and breastfeeding, which could encourage them to eat more healthily and to breastfeed their baby. There are no direct risks involved with participating.

Where is the study run from? 1. Kianhutu Health Centre (Kenya) 2. Makongeni Health Centre (Kenya)

When is the study starting and how long is it expected to run for? February 2012 to October 2014

Who is funding the study? National Commission of Science Technology and Innovation (Kenya)

Who is the main contact? Ms Dorothy Mituki

# **Contact information**

**Type(s)** Public

**Contact name** Ms Dorothy Mituki

**Contact details** Egerton University Department of Human Nutrition P.O BOX 536 Egerton Nakuru Kenya 20115

# Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

Secondary identifying numbers EU/DVRE/028

# Study information

#### Scientific Title

Effects of structured nutrition education on maternal perceptions, and exclusive breastfeeding duration in Kiandutu health centre, Thika - Kenya: A cluster randomized controlled study

#### Study objectives

Null hypotheses: 1. There is no significant difference in socio-economic, household food security and post-partum factors between mothers in the structured nutrition education group and the comparison group 2. There is no significant difference in BSE and breastfeeding perceptions for mothers in the two groups at baseline

3. There is no significant difference in BSE and breastfeeding perceptions for mothers in the two groups before and after the intervention

4. There is no significant difference in BSE and breastfeeding perceptions for mothers in the intervention and those in the comparison groups after the intervention

5. There is no significant relationship between socio-economic, household food security postpartum factors, BSE, breastfeeding perceptions and EBF duration

#### Ethics approval required

Old ethics approval format

**Ethics approval(s)** Egerton University Ethics Committee, 07/06/2013, ref: EU/DVRE/028

**Study design** Cluster randomised controlled trial

**Primary study design** Interventional

**Secondary study design** Cluster randomised trial

**Study setting(s)** Hospital

**Study type(s)** Other

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

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

Breastfeeding

#### Interventions

The participating villages are randomized to one of two groups in a 1 :1 ratio using the Microsoft excel function.

Intervention group: Participants receive personalized nutrition education at the health facility. This involves a talk on the importance of proper diet during pregnancy and lactation, including dietary diversity, the value of exclusive breastfeeding and the fact that all women can practice EBF with a positive mind set. It will also involve giving them information on how to deal with issues relating to breastfeeding. The content is developed from the Kenyan maternal infant and young child guidelines (which is developed from the UNICEF/WHO maternal infant and young child guidelines). Participants are followed up in their homes by Community Health Workers (CHWs) for 2 times during pregnancy at ≤ 28 and 37 weeks gestation and every month after delivery up to six months post-partum.

Comparison group: Participants receive standard care for the duration of the study. This involves group nutrition education and general health issues done by the health care workers at the facility

Follow up for all participants involves taking their 24 hour recall and weight data at 1, 6, 10 and 14 weeks and 6 months at the study facility.

#### Intervention Type

Behavioural

#### Primary outcome measure

Exclusive breastfeeding rate is measured using the 24 hour recall at 1, 6, 10 and 14 weeks and 6 months.

#### Secondary outcome measures

 Breastfeeding self-efficacy is measured using the breast feeding self efficacy scale (short form) (BSES-SF) at baseline (34 weeks) at mid (37 weeks) and at end of intervention (6 months)
 Perceptions towards exclusive breastfeeding is measured using the Deborah McCarter-Spaulding perceptions scale at baseline (34 weeks) at mid (37 weeks) and at end of intervention (6 months)

#### Overall study start date

12/02/2012

## Completion date

05/10/2014

# Eligibility

#### Key inclusion criteria

- 1. Women who are less than six months gestation
- 2. No history of chronic disorders such as hypertension, diabetes, HIV and tuberculosis

3. Aged 18 years and over

#### Participant type(s)

Other

## Age group

Other

#### **Lower age limit** 18 Years

**Sex** Female

#### **Target number of participants** Healthy pregnant owmen, 157 mothers per arm

#### Total final enrolment

#### Key exclusion criteria

- 1. Preterm delivery and Infants delivered less than 37 weeks gestation
- 2. Multiple births, only mothers with singletons continued in the study
- 3. Low birth weight (below 2500gms)
- 4. Those who give bitch to children born with congenital disorders

# Date of first enrolment 03/09/2013

Date of final enrolment 02/10/2014

## Locations

**Countries of recruitment** Kenya

#### Study participating centre

**Kianhutu Health Centre** Thika-Garissa Highway Off Broadways Primary School P.O BOX 3,304 Madaraka Thika Kenya 01002

**Study participating centre Makongeni Health Centre** Thika-Garissa Highway P.O BOX 1,747 Madaraka Thika Kenya 01002

### Sponsor information

**Organisation** National Commission of Science Technology and Innovation

Sponsor details

8th -9th Floor, Utalii House off Uhuru Highway, Nairobi P. O. Box 30623, 00100 NAIROBI Kenya 00100 +254 203 310 571 / +254 202 241 349 info@nacosti.go.ke

**Sponsor type** Research council

Website http://www.nacosti.go.ke

ROR https://ror.org/03wzc0b85

## Funder(s)

**Funder type** Government

#### Funder Name

National Commission of Science Technology and Innovation

### **Results and Publications**

**Publication and dissemination plan** Planned publication in a peer reviewed journal.

Intention to publish date 30/05/2017

Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Data sharing statement to be made available at a later date

#### Study outputs

| Output type            | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|------------------------|---------|--------------|------------|----------------|-----------------|
| <u>Results article</u> |         | 28/04/2020   | 06/06/2023 | Yes            | No              |