

# Employing general practitioners for delivering a child development package in Pakistan

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<b>Registration date</b> 31/12/2014	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 01/11/2019	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Early child development is dependent on the mother's ability to provide the right physical and social environment and support to her young child. In Pakistan, like most developing countries, early child development has been a grossly neglected area of public health importance, where the main challenges include tackling the problem of high numbers of children suffering from chronic malnutrition, the low level of mothers' skills for child development, and maternal mental health problems. Child malnutrition and the mother's caring ability (including her mental health) are considered to contribute significantly to the delayed development of child milestones: this is mainly due to under-weight births, poor breastfeeding and weaning practice, and recurrent infections. It is suggested that these are linked to low literacy, psychosocial factors and lack of counselling for maternal mental health problems. In poor urban settings, the mothers' ability to cater for child development needs is constrained by their low literacy, poor mental health and lack of skills. The aim of the study is to develop and evaluate a set of infant nutrition and development products along with maternal mental health products that could be implemented in poor urban settlements. For this purpose private clinics will be employed to promote the development of poor urban infants (age  $\leq 1$  year). The main objectives are to:

1. Develop an integrated early child development (infant) care package with three key components: infant development, nutrition counselling, and maternal mental health.
2. Arrange, implement and monitor the care products at 22 selected private clinics in poor urban localities.
3. Design and conduct a study to evaluate the effectiveness and feasibility of the intervention.

### Who can participate?

Mothers with infants who were delivered within 1 month of full-term ( $\geq 36$  weeks) and who live within the catchment area of the study.

### What does the study involve?

The selected 22 private clinics are randomly allocated into one of two groups. Those mothers and infants attending clinics in group 1 (intervention group) are given the designed products for nutrition, early child development and maternal depression. Mothers and infants attending clinics in group 2 (control group) receive the usual care.

What are the possible benefits and risks of participating?

It has been assumed that the intervention group will benefit from the products introduced at the clinics with better infant nutrition and better progress for developmental milestones. The control group will not be deprived of any care or referral needed to minimize any risk or ethical issue.

Where is the study run from?

Association for Social Development (Pakistan).

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

October 2014 to September 2016.

Who is funding the study?

Grand Challenges Canada (Canada)

Who is the main contact?

Dr Muhammad Amir Khan

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### **Study website**

<http://mhinnovation.net/innovations/sustainable-public-private-partnership-integrated-child-development-care>

## **Contact information**

### **Type(s)**

Scientific

### **Contact name**

Dr Muhammad Amir Khan

### **Contact details**

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## **Additional identifiers**

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

## Study information

### Scientific Title

A sustainable public-private partnership for delivering integrated child development care in Pakistan: a clustered randomized controlled trial

### Acronym

N/A

### Study objectives

Primary hypothesis: the introduction of context-sensitive early child development (ECD) packages will reduce childhood development delay (i.e., motor skills: from 20% to 16%; cognition: from 10% to 03%; and language: from 30% to 22%) in the catchment area.

Secondary hypotheses:

1. There will be a decrease in the prevalence of maternal depression from 36% to 29% through a counseling package facilitated by General Practitioner's Paramedic
2. Promotion of nutrition packages and medications will lead to a reduction in stunting prevalence (2SD HAZ)

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

NBC 154, National Bioethics Committee Pakistan, 11/09/2014

### Study design

Randomized controlled cluster trial with two arms

### Primary study design

Interventional

### Secondary study design

Cluster randomised trial

### Study setting(s)

Not specified

### 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

Child development, maternal depression, child nutrition

## **Interventions**

Intervention arm:

1. Developing context-sensitive intervention products through TWG (including guidelines, training and counseling tool)
2. Mapping and selection of priority locations and a private clinic in each selected location
3. Training of doctors and paramedics at selected private clinics for ECD, Maternal Health and Nutrition
4. Identifying and enabling of community advocates (for enhanced ECD care access)
5. Branding of selected private clinics
6. Identifying and recruiting (by doctor) eligible mother-child dyads, and keeping essential baseline record
7. Conducting quarterly counseling sessions of mothers (by paramedic) at a private clinic (for promoting child and maternal mental health)
8. Offering low-dose quarterly Vitamin A supplement, mainly as a client retention measure
9. Identifying nutritional and/or child brain development and/or maternal mental health deficiencies, and prescribe remedial action
10. Making community aware (about ECD care) through enabled community advocates and clinic branding
11. Applying mobile phone technology for client compliance to the quarterly follow-up visits (including retrieval of delayed clients)
12. Identifying and referring (by doctor) the child and/or mothers with need for specialist care
13. Conducting facility and district level monitoring events

Control arm:

Routine clinic practice

## **Intervention Type**

Mixed

## **Primary outcome measure**

Reduction in the percentage of early childhood development delays through the context-sensitive packages delivered. The primary outcomes will be measured according to the baseline i.e one month after delivery (infants less than or equal to one month of age; infant development, nutrition and maternal mental health will be assessed at this point). Subsequent measurements will be made at 3 months, 6 months, 9 months and endline at the 12th month.

## **Secondary outcome measures**

1. Decrease in the prevalence of maternal depression through counseling
2. Decrease in the prevalence of stunting through nutrition counseling

The secondary outcomes will be measured according to the baseline i.e one month after delivery (infants less than or equal to one month of age; infant development, nutrition and maternal mental health will be assessed at this point). Subsequent measurements will be made at 3 months, 6 months, 9 months and endline at the 12th month.

## **Overall study start date**

01/10/2014

**Completion date**

30/09/2016

## Eligibility

**Key inclusion criteria**

All mother-infant dyads  $\leq 1$  month of full-term ( $\geq 36$  weeks) delivery within catchment area (no migration during tenure of trial)

**Participant type(s)**

Patient

**Age group**

Mixed

**Sex**

Both

**Target number of participants**

2,200 mother-infant dyads (1,100 in each arm) in 22 clusters (where clusters refer to General Practitioner clinics)

**Key exclusion criteria**

Child known to have congenital abnormality, history of delayed cry or seizures, cretinism, low birth weight  
<2500 g, death of either mother or child

**Date of first enrolment**

01/02/2015

**Date of final enrolment**

01/11/2015

## Locations

**Countries of recruitment**

Pakistan

**Study participating centre**

Association for Social Development

Islamabad

Pakistan

44000

# Sponsor information

## Organisation

Grand Challenges Canada

## Sponsor details

MaRS Centre  
South Tower  
101 College Street  
Suite 406  
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## Sponsor type

Government

## Website

<http://www.grandchallenges.ca/saving-brains/>

## ROR

<https://ror.org/02snbhr24>

# Funder(s)

## Funder type

Government

## Funder Name

Grand Challenges Canada

## Alternative Name(s)

Grands Défis Canada, GCC

## Funding Body Type

Government organisation

## Funding Body Subtype

National government

## Location

Canada

# Results and Publications

## Publication and dissemination plan

We are intending to publish four papers: protocol paper, main trial paper, costing paper and a qualitative article.

## Intention to publish date

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	protocol	09/01/2017	01/11/2019	Yes	No