Testing the effectiveness of comprehensive early childhood development (CECD) services in rural areas of China

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------|---|--|--|--|
| 06/05/2019 | | ☐ Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 17/05/2019 | Completed | [X] Results | | |
| Last Edited | Condition category | [] Individual participant data | | |
| 03/06/2021 | Other | | | |

Plain English summary of protocol

Background and study aims

A growing number of studies point to the importance of early childhood intervention for fulfilling childhood development potential. The critical period before age three is considered to be a crucial "window", during which interventions designed to improve child development can have significant and lasting effects, even into adulthood. Moreover, intervention during this time period is considered to be the most cost-effective from a policy perspective.

This project seeks to explore the most cost-effective interventions and associated implementation protocols to help to young babies and children living in rural China to reach their full developmental potentials. To do so, we propose to conduct a large-scale randomized controlled trial to measure the impact of a Comprehensive Early Childhood Development (CECD) intervention on parental knowledge, attitude, behavior and, most importantly, on child development outcomes.

Who can participate?

Children aged between 6 and 24 months from the 50 villages involved can participate.

What does the study involve?

We plan to work together with social institutions and local government, empower them with training sessions so that they can serve as competent CECD service providers (i.e. parenting instructors), and make up for the commercial and social deficiencies in rural areas. The parenting instructors will visit treatment group during weekly home visiting, demonstrate and guide these parents (caregivers) how to play and interact with the babies to help the development of cognition, language, motor and social emotion by using the week-by-week parenting curriculum and toys (or picture books).

What are the possible benefits and risks of participating?

Participants may benefit from improved neurodevelopment and quality of life. There will be no risk for participants to be part of this trial, according to our study design.

Where is the study run from?

- 1. China Center for Agricultural Policy Peking University
- 2. School of Economics and Management Jiangxi Agricultural University

When is the study starting and how long is it expected to run for? January 2018 to October 2018

Who is funding the study? China Center for Agricultural Policy - Peking University, China.

Who is the main contact? Prof. Renfu Luo, luorf.ccap@pku.edu.cn

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

AEARCTR-0003316

Study information

Scientific Title

Cluster Randomised Trial of the effectiveness of comprehensive early childhood development (CECD) services in rural areas, China

Study objectives

Early childhood stimulation and improved parental practices will have positive effects on a child's cognitive, language, motor and socioemotional development.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 04/07/2017, Peking University Institutional Review Board (PUIRB) (Room 501, Yifu Building, Peking University Medical Department, No. 38 College Road, Haidian District, Beijing, China; llwyh@bjmu.edu.cn; +86 010-82805751), ref: IRB00001052-17056

Study design

Cluster randomized controlled trial

Primary study design

Interventional

Secondary study design

Cluster randomised trial

Study setting(s)

Community

Study type(s)

Quality of life

Participant information sheet

No participant information sheet available

Health condition(s) or problem(s) studied

Child development

Interventions

We will implement the intervention in each of our 50 treatment villages. During the weekly home visits, the parenting instructors will demonstrate and guide the parents (caregivers) how to play and interact with the babies to help the development of cognition, language, motor and social emotion by using the week-by-week parenting curriculum and toys (or picture books). After that, the parenting instructors will tell the parents (caregivers) nutrition and health knowledge for the child at that age. And finally the parenting instructors will give the curriculum and toys of the week to the family and collect the curriculum and toys used last week.

The initial phase of the trial has two data collection rounds: a baseline survey (completed) and one at endline. These data include detailed family characteristics and parental characteristics that will allow us to understand the heterogeneity of outcomes for different groups, plus a tenminute video for each of our treatment household recording the interaction between the child and caregiver. We will videotape during both baseline and endline survey to observe subtle changes in terms of the quality of interaction as well as the child's performance.

Intervention Type

Behavioural

Primary outcome measure

- 1. Test scores of Caregiver Reported Early Childhood Development Instruments (CREDI) and Bayley Scales of Infant Development (BSID) at baseline and follow-up (50-weeks).
- 2. Number of children delayed in cognitive, language, motor and social-emotion development at follow-up (measured using the above tools)

Secondary outcome measures

- 1. Changes in parenting practices and parental adjustment, assessed from reports of mothers using Parenting and Family Adjustment Scales (PAFAS) from baseline to follow-up.
- 2. Parental knowledge of normative infant development, assessed using Knowledge of Infant Development Inventory (KIDI) from baseline to follow-up.
- 3. Aspects of the quality and quantity of psychological stimulation and cognitive support available in the home environment, assessed using the Home Observation for Measurement of the Environment Inventory (HOME) from baseline to follow-up.
- 4. Parenting Pressure measured by Parenting Depression Index (PD) from baseline to follow-up.

Overall study start date

01/08/2018

Completion date

31/12/2019

Eligibility

Key inclusion criteria

- 1. Children aged between 6 and 24 months
- 2. Able and willing to cooperate with the examination

Participant type(s)

Healthy volunteer

Age group

Child

Lower age limit

6 Months

Upper age limit

24 Months

Sex

Both

Target number of participants

Total sample size is 690 families with children who were in our desired age range (6-24 mo)

Total final enrolment

635

Key exclusion criteria

1. Parents do not consent

Date of first enrolment

08/01/2018

Date of final enrolment

08/10/2018

Locations

Countries of recruitment

China

Study participating centre

China Center for Agricultural Policy - Peking University

Wangkezhen Building Peking University No.5 Yiheyuan Road Haidian District Beijing China 100871

Study participating centre

1101 Zhimin Avenue

School of Economics and Management - Jiangxi Agricultural University

Qingshanhu Economic and Technological Development Zone Nanchang Jiangxi China 330045

Sponsor information

Organisation

UBS Optimus Foundation

Sponsor details

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Financial Street 7th
Xicheng District
Beijing
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+86 21 3866 8051
joco.hu@ubs.com

Sponsor type

Charity

Website

https://www.ubs.com/microsites/optimus-foundation/en.html

Organisation

National Natural Science Foundation of China

Sponsor details

83 Shuangqing Road Haidian District Beijing China 100085 86-10-62327001 bic@nsfc.gov.cn

Sponsor type

Research council

Website

http://www.nsfc.gov.cn/

Funder(s)

Funder type

University/education

Funder Name

China Center for Agricultural Policy, Peking University

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal.

Intention to publish date

31/12/2020

Individual participant data (IPD) sharing plan

All data generated or analysed during this study will be included in the subsequent results publication

IPD sharing plan summary

Other

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | | 01/10/2020 | 03/06/2021 | Yes | No |