

Seeing is Learning: Vision Care for Children in Three Migrant Communities

Submission date 16/11/2014	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 12/12/2014	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 29/05/2020	Condition category Eye Diseases	☐ Individual participant data

Plain English summary of protocol

Background and study aims

A large number of school children in rural China have problems with their vision that are currently not being corrected by eyeglasses. Our previous research has shown that giving myopic (short sighted) children glasses to correct their vision leads to a significant improvement in their performance at school. However, we have also conducted interviews which suggest that nothing is being done to address this problem. Here, we will attempt to update and duplicate the results of our earlier study, and also to build on the previous research by determining the extent to which teachers influence the health behavior of their students as regards to eye care.

Who can participate?

Children aged 8-12 years and attending a public elementary school in a rural area of northwestern China. The schools are randomly selected from areas surrounding major cities. These areas are known to be poor and have a large migrant population.

What does the study involve?

Schools are randomly allocated into one of three groups. Children in group 1 schools do not receive any eyeglasses and carry on as usual. Children and teachers in group 2 schools are given a basic 5-minute vision test. Those children whose basic vision test suggests that they have a problem with their vision then have an auto-refraction test. Children who are found to need eyeglasses are given a free, high-quality pair of glasses. They will also be taught the importance of proper eye care. Children and teachers in group 3 are treated in the same way as those in group 2, but teachers are also given an incentive to promote the wearing of eyeglasses in the classroom.

What are the possible benefits and risks of participating?

The possible benefits for children include undergoing a high-quality vision examination, determining whether the participant has a vision problem, receiving a prescription and made-to-order pair of glasses the participant would otherwise never have acquired on their own. These services are rendered for free. The varied benefits of glasses wear among those with refractive error are documented in numerous clinical studies. Insofar as risks, a small number of subjects harbor adverse reactions to the medication used to dilate their eyes. This risk is manageable with the staff available on hand during the study.

Where is the study run from?

Schools in a rural area of northwestern China. Planning is carried out from our offices at Stanford University, and those of our collaborators in Beijing.

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

January 2013 to January 2015.

Who is funding the study?

Caterpillar (USA), Brien Holden Vision Institute (Australia) and Essilor (France).

Who is the main contact?

Professor Scott Rozelle

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Contact information

Type(s)

Scientific

Contact name

Prof Scott Rozelle

Contact details

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94305

Additional identifiers

Protocol serial number

28343

Study information

Scientific Title

Seeing is Learning: Vision Care for Children in Three Migrant Communities: an interventional cluster-randomized multicentre controlled trial

Acronym

SIL II

Study objectives

We predict that fitting migrant students in China with eyeglasses, educating these students about eyeglasses and giving teachers incentives to ensure children wear eyeglasses will raise performance in school among children who receive corrective glasses.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Stanford University Internal Review Board Human Subjects Research, Protocol ID: 28343

Primary study design

Interventional

Study design

Interventional cluster-randomized multicentre controlled trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Vision care

Interventions

1. Control (no eyeglasses)

2. Free eyeglasses + information schools

Students and teachers will undergo a 5 minute basic vision test. Those students whose basic vision test indicates a problem will continue on to the auto-refraction test. If this test indicates that students need eyeglasses, they will receive a free, high quality pair of glasses. They will also undergo a training session in which they will learn about the importance and proper vision care.

3. Free eyeglasses + information + teacher incentive schools

These schools will receive the same intervention as described above, but the teachers in these schools will receive an incentive to promote eyeglasses wear among the students in their class.

Intervention Type

Device

Primary outcome(s)

Measured in both a baseline and follow-up survey:

1. Number of children wearing glasses regularly

2. School performance, determined from a standardized test we will administer and students grade

Key secondary outcome(s)

Measured at baseline by way of a survey filled out by the subjects:

1. Student interest in school

2. Student mental health

3. Student self confidence

Completion date

12/01/2015

Eligibility

Key inclusion criteria

1. Male and female fourth and fifth grade elementary school students,
2. Ages 8 to 12
3. Attending public elementary schools in rural areas of northwestern China
4. Schools are randomly selected from areas surrounding major cities. These areas are known to have high concentrations of migrants and are known to be relatively poor.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

8 Years

Upper age limit

12 Years

Sex

All

Key exclusion criteria

Students will be excluded from the trial if they have an ailment or condition that prevents them from being safely dilated and given a proper corrective vision prescription (existing literature indicates this would be at most one percent of the sample population).

Date of first enrolment

09/01/2013

Date of final enrolment

12/01/2015

Locations**Countries of recruitment**

China

United States of America

Study participating centre

Stanford University

450 Serra Mall

Stanford

United States of America

94305

Sponsor information

Organisation

Stanford University (USA)

ROR

<https://ror.org/00f54p054>

Funder(s)

Funder type

Industry

Funder Name

Caterpillar Inc.

Alternative Name(s)

Caterpillar Inc., CAT, Inc., Caterpillar Tractor Company, Caterpillar Tractor Co., CAT

Funding Body Type

Government organisation

Funding Body Subtype

For-profit companies (industry)

Location

United States of America

Funder Name

Brien Holden Vision Institute

Funder Name

Essilor

Results and Publications

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?
Results article	results	01/11/2015	29/05/2020	Yes	No