

This study looks at whether a systematic CVD risk reduction and case management programme will reduce the number of CVD events in Zhejiang province in China.

Background

Cardiovascular disease (CVD) accounts for 38% of deaths in China. It is estimated that there are 200 million patients with hypertension in China, a significant risk factor for developing CVD. CVD rates are higher in rural areas in China compared to urban areas, in part due to high salt intake.

In rural Zhejiang province, primary care is provided by public 'township' hospitals, each linked to 10-15 health stations in villages. Health stations assess hypertensive and diabetic patients and prescribed drugs if needed. However, throughout Zhejiang province there remains a need to provide high quality, systematic care for patients with hypertension and diabetes.

Study aims

The study aims to assess whether a systematic CVD risk reduction and case management programme will reduce the number of CVD events in Zhejiang province in China, compared to the usual care provided in township hospitals.

Objectives

1. To compare the current process of managing hypertension and diabetes in township hospitals, with a systematic, high quality care and lifestyle change programme.
2. To determine if such a programme is cost effective, easy to implement and easy to scale up.
3. To explore the barriers and facilitators that affect CVD control, and how to overcome these barriers when implementing a systematic, public health approach within primary care services.



Interviews in the field

Researchers:

Prof Xiaolin Wei, Guanyang Zou, Zhitong Zhang, Jia Yin and Simin Deng, Global Health Research and Development (GHRD), China

In-country partners:

- Chinese University of Hong Kong (CUHK)
- Zhejiang Centres of Disease Control (CDC)
- Zhejiang University

Project setting:

Shaoxing Prefecture, Zhejiang Province

Research themes addressed:

- Primary Care
- Accessible and user-friendly services
- Quality of care



Labs at Shanghai hospital

The pilot study

We have conducted pilot in rural Zhejiang, where 8182 people aged between 40-75 were assessed for one year. Following the pilot, we developed the CVD care package further and conducted another pilot study, including interviews and reviews of patient records.

These pilots showed that 'CVD at risk' patients could be identified from the records, and that delivering the CVD care and prevention package was feasible in a primary health care setting.

The study

This study is a clustered randomised trial in Zhejiang province:

- There will be 34 intervention and 33 control township hospital arms
- Each area has around 9,000 adults aged 50-74. Everyone at risk in this age group will receive improved care in the intervention arms (and control arms if successful after the trial).
- 14,400 people per arm will be enrolled in the study

The primary outcome is a difference in the intervention clusters, in reported CVD events including acute myocardial infarction, strokes and related deaths.

These results will be collected from the Zhejiang CDC internet based CVD surveillance system, which is functioning well in Zhejiang, as well as a patient survey.

We will conduct a process evaluation and costing study alongside the clustered randomised trial.

Potential scaling up of research findings

Zhejiang CDC, Zhejiang University and local practitioners have been involved in adapting the high quality care and lifestyle programme to the local context. The CDC is committed to scaling up the package if it is found to be effective.

For more information about this project, email Simin Deng at dengsimin2012@126.com

About COMDIS-HSD

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Working with partner NGOs in [7 countries](#), we provide evidence to policy makers in low-middle income countries to help them improve their health service delivery processes.

We aim to improve demand for, access to, and quality of prevention and care for common diseases, especially in underserved populations.

By sharing our evidence-based research findings, we ensure changes to health service delivery policy and practice in low-middle income countries and beyond.

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Email us at:
comdis-hsd@leeds.ac.uk

Nuffield Centre for International Health and Development,
University of Leeds,
101 Clarendon Road, Leeds,
LS2 9LJ, UK.

