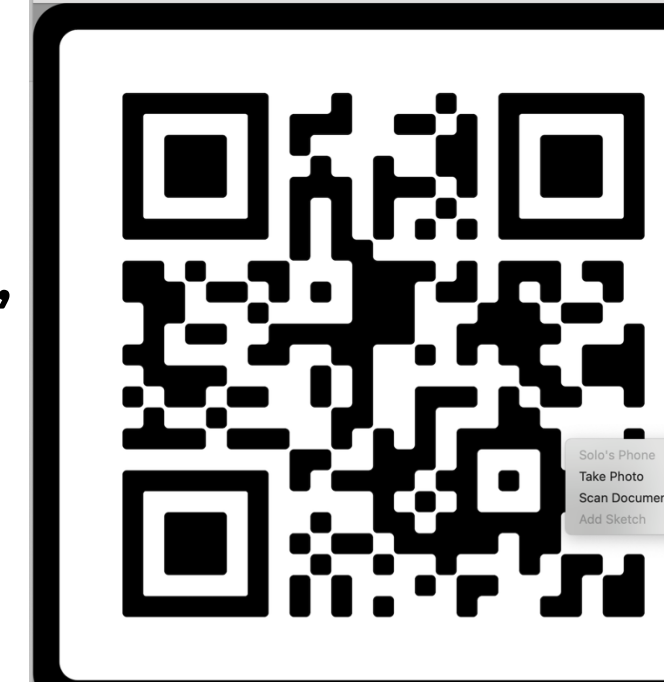


# Community-based strategies to improve health-related outcomes in people living with hypertension in Low Middle-Income Countries: A systematic review and meta-analysis

P1-E14



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We systematically assessed community-level interventions for improving hypertension control in low- and middle-income countries. After screening 7125 articles, 18 studies were included in the analysis. The findings suggest that community-based strategies can effectively address hypertension in these countries without compromising the quality of care.

## Introduction

### Non-Communicable Diseases (NCDs):

- Kills **41 million people each year**
- **60% of disability-adjusted life years** (DALYs)
- **70% of deaths** and more than **80% of years lived with disability (YLD)**
- The estimated annual incremental cost is **\$131 billion per year**

### Hypertension (HTN):

- Affects **1 Billion** people globally.
- Prevalence in **LMIC** is about **22% (≥25 years)**
- **43.6%** of the cases are aware of having this condition
- **36.9%** receive appropriate treatment
- **9.9%** are controlled
- DALYs associated with HTN **increased** from **95.9 million** to **143.0 million** (Forouzanfar et al., 2017)

- We analysed 8 RCTs and 11 cRCTs.
- The summary effect of blood pressure control from the meta-analysis was significant: risk ratio = 1.48 (95% CI = 1.40 – 1.57, n=12).
- For the RCTs, risk ratio was 1.68 (95% CI = 1.40 – 2.01, n=5).
- For the cRCTs, risk ratio=1.46 (95% CI = 1.32 – 1.61, n=7).
- Also, studies that reported individual data for the multicomponent interventions, the risk ratio was 1.27 (95% CI = 1.04 – 1.54, n=3).

## OBJECTIVE

This systematic review and meta-analysis evaluated community-level interventions to improve hypertension control among patients living in LMICs.

## Methods

Developing countries [MeSH] OR Low Middle Income Countries



Community-based intervention\* OR Capacity building OR Medical management OR Healthcare provider\* OR Preventive medicine\* OR Community involvement intervention\* OR Community action intervention\*



Arterial Pressure [Mesh] OR Blood Pressure [Mesh] OR Blood pressure determination [Mesh] OR Increased Pressure OR Diastolic Pressure OR Systolic Pressure OR Hypertension

- Nine databases were searched (July 22, 2023) for randomized controlled trials (RCTs) and cluster randomized control trials (cRCTs).
- Studies were included based on explicit focused on blood pressure control.
- Quality assessment was done using the Revised Cochrane Risk of Bias tool for randomized trials (ROBS 2).
- Results were presented following the provisions in the PRISMA checklist.
- Fixed-effect meta-analysis were conducted for studies that reported continuous outcome measures.

## Results

Records identified= 7215

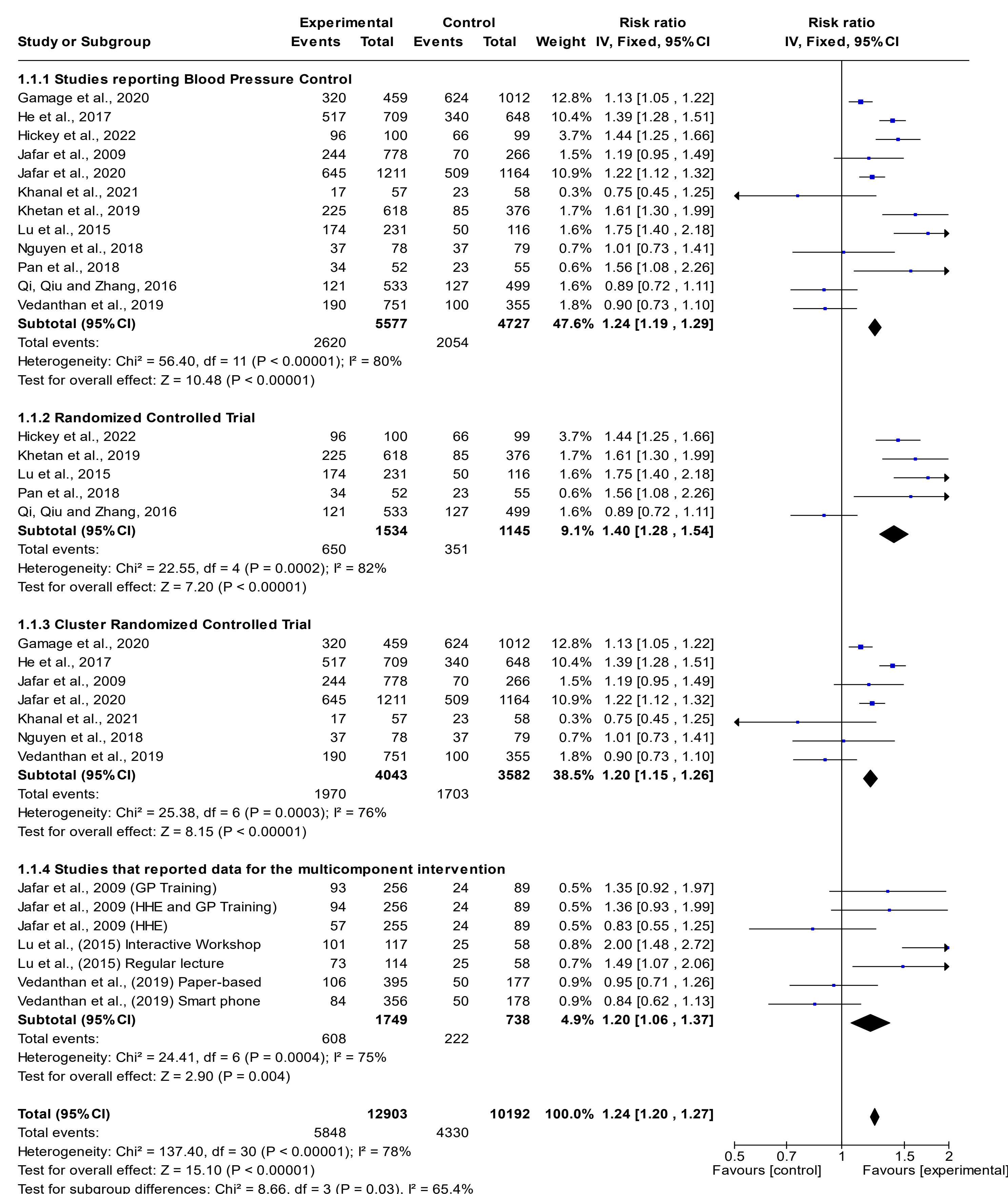
Records Screened = 6851

Studies included Qualitative synthesis = 19

Studies included Quantitative synthesis = 12

Additional Records = 0

**FUNDED BY:** Kintampo Health Research Centre, RDD Ghana/Global Health Support Program of the University Medical Center Utrecht (UMCU), University of Utrecht. Email: [Solomon.nyame@Kintampo-hrc.org](mailto:Solomon.nyame@Kintampo-hrc.org)



## Conclusion

- We highlight the need for community-based interventions to address the burden of hypertension in LMICs.
- It is however important to evaluate how these interventions can be implemented within existing healthcare systems.

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