



Effectiveness of Peer-Trained Community Health Worker Intervention on Obesity Management in Chinese Adults Living in Informal Houses: A 6-Months Preliminary Investigation

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INTRODUCTION

To evaluate the six-month effectiveness of weight management in housing insecure populations using habit-based interventions provided by trained peers.

Keywords: Community health worker, Weight management, Randomised controlled trial

METHODS

- Community health workers (CHWs) are persons who provide health screening and care without formal medical education. Services provided by CHWs are **more accessible and culturally-sensible** to usual care for their lower cost and higher availability in low-income areas.
- In an **open-labelled, three-arm, parallel cluster randomized controlled trial** conducted in inadequately housed population in Hong Kong (HK), we evaluated the impacts on **obesity prognosis** using CHW intervention in comparing to nursing/dietetics care in Chinese adults (aged 18 year-old or above).
- Administrative data (including number of sessions conducted, loss-to-follow-up rates etc.) of the trial was reported for feasibility assessment.
- Anthropometric measurements such as waist circumference (WC) and body mass index (BMI) were used to measure obesity prognosis.
- **Multivariate mixed effect models**, using family cluster as fixed effect term, were used to evaluate effectiveness of CHWs intervention.



RESULTS

- Between **25th June 2023 and 14th April 2025**, recruited through a primary screening programmer. During the period, there were **744 follow-up sessions** being conducted. The loss-to-follow-up rates was 1.6%.
- This preliminary investigation included **185 obese individuals, mean age [SD] = 48.97 [11.543], 73% female**.
- Most of the families earn **less than HKD 24999 a month**, compared to 49.8% of the general population in HK.
- Regression showed that **CHWs intervention could reduce waist circumference and reduce in BMI** in an interim reporting of six months.

CONCLUSION

CHWs intervention is a **feasible and effective healthcare intervention** with Chinese, housing vulnerable adults living in HK.