Title of your study:

Authors & Affiliations: The names and institutions of all the authors involved.

Aims: What was the main purpose or question of your research?

Methods: How did you conduct the study? (e.g., study design, number of participants, what you measured, how you analyzed the data).

Results: What were your key findings? (Include specific data or statistics if possible, like percentages, p-values, etc.).

Conclusions: What is the main takeaway message from your research? What are the implications?

Keywords: 2-4 keywords listed in alphabetical order

Effectiveness of a nurse-led, home-based heart failure self-management programme (HOM-HEMP) for patients with chronic heart failure: a three-arm stratified randomized controlled trial.

Ying Jiang¹, Karen Wei Ling Koh², Hadassah Joann Ramachandran¹, Hoang D. Nguyen³, Der Shin Lim¹, Yee Kian Tay⁴, Shefaly Shorey¹, Wenru Wang¹

- ¹ Alice Lee Centre for Nursing Studies, Yong Loo Lin School of Medicine, National University of Singapore, Singapore
- ² National University Heart Centre Singapore, National University Hospital, Singapore
- ³ School of Computing Science, University of Glasgow, Singapore
- ⁴ Regional Health System, National University Health System, Singapore

Aim(s): Heart failure (HF) self-care remains a challenge for many patients. This study aimed to evaluate a nurse-led, home-based self-management psychosocial education intervention (HOM-HEMP). The primary outcome was patient HF self-care in terms of maintenance, management, and confidence. Secondary outcomes included cardiac self-efficacy, health-related quality of life, anxiety, and depression. Clinical outcomes included New York Heart Association (NYHA) functional class and unplanned health service visits.

Methods: A three-arm stratified randomized controlled trial was conducted. A total of 213 participants with heart failure were recruited from a tertiary hospital in Singapore. Participants were randomly allocated to a control group (usual care), experimental group A (HOM-HEMP intervention), or experimental group B (HOM-HEMP plus a supplemental smartphone application). Data were collected at baseline, 6 weeks, 3 months, and 6 months.

Results: Compared to the control group, participants in both experimental groups had significantly higher levels of HF self-care maintenance, confidence, and management at all follow-ups. The experimental groups also had significantly higher levels of cardiac self-efficacy, better health-related quality of life, and lower depression levels than the control group. A higher proportion of participants in the experimental groups showed improved NYHA functional class at 6-week and 3-month follow-ups. At 6 months, experimental group B had significantly fewer cardiac-related unplanned hospital admissions and emergency room visits than the control group. Outcomes between experimental groups A and B were not significantly different.

Conclusions: The findings suggest that the HOM-HEMP is an effective intervention for patients with heart failure in Singapore

Keywords: heart failure, home-based, self-management.