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A visiting nursing care program using community health advisors for the frailty of vulnerable older populations

Submission date	**Recruitment status**	[X] Prospectively registered
08/12/2025	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
30/12/2025	Ongoing	[_] Results
Last Edited	**Condition category**	[_] Individual participant data
30/06/2026	Other	[X] Record updated in last year

Plain English summary of protocol

Background and study aims

The aging population is increasing rapidly, and frailty, affecting more than half of older adults, including those who are pre-frail, is associated with functional decline, falls, institutionalization, and higher mortality. Because frailty is preventable and potentially reversible, effective community-based strategies are essential. In Korea, public health centers provide frailty-focused case management through the visiting health management program, yet its effectiveness has not been fully tested. Workforce shortages, especially in underserved regions, further limit equitable access to nurse-led services. International evidence shows that community health advisors (CHAs) can effectively support vulnerable populations by offering culturally tailored health education, linking individuals to public services, and providing social support; integrating CHAs into home visiting care may therefore strengthen both reach and quality of frailty management.

This study aims to evaluate the NurVisitCare+CHA program, a community health advisor–enhanced home visiting frailty case management model, for frail older adults living in the community.

Who can participate?

Community-dwelling elderly individuals aged 65 to 84 years who are participating in public health center programs, and are classified as at-risk frail elderly (pre-frail, scoring 4–12 points) based on the Frailty Screening Questionnaire for Older Adults.

What does the study involve?

Participants in the NurVisitCare+CHA program will be assigned to one of three groups—control, NurVisitCare, or NurVisitCare+CHA—based on their administrative units (i.e., dongs), rather than by individual random assignment. The NurVisitCare program is a 12-week intervention for at-risk frail older adults that includes eight sessions delivered as 60–90-minute home visits or 20–30-minute telephone consultations, combining customized health education (e.g., chronic disease prevention, nutrition) with tailored physical activity (e.g., stretching, strength training). Both the NurVisitCare and NurVisitCare+CHA groups will receive this program, while the control group will receive standard home health care services. In addition, the NurVisitCare+CHA group will

receive six supplementary home visits from community health advisors. All groups will complete pre- and post-intervention assessments through face-to-face surveys and physical measurements.

What are the possible benefits and risks of participating?
Participants in all groups will benefit from improved awareness of their overall health and frailty levels through self-reported questionnaires and physical assessments. The NurVisitCare and NurVisitCare+CHA groups will additionally participate in the three-month “NurVisitCare Program,” a specialized intervention designed to prevent frailty through tailored case management for at-risk older adults, offering a more individualized approach than standard visiting healthcare services. Furthermore, the NurVisitCare+CHA group will receive additional social support from trained community health advisors. All participants will receive incentives according to their level of participation.
While participants may experience some physical or psychological discomfort during questionnaires and body measurements, they will be fully informed of any potential inconveniences beforehand. Flexibility in scheduling and assurance of voluntary participation will be emphasized to minimize discomfort or pressure.

Where is the study run from?
College of Nursing, Korea University.

When is the study starting and how long is it expected to run for?
January 2026 to December 2026.

Who is funding the study?
National Research Foundation of Korea (NRF) grant from the Ministry of Science and ICT, Korean Government.

Who is the main contact?
Jina Choo, PhD, DrPH, RN, jinachoo@korea.ac.kr

Contact information

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National Research Foundation of Korea (NRF) grant from the Ministry of Science and ICT, Korean Government
RS-2024-00336847

Study information

Scientific Title
Effectiveness of a visiting nursing care program using community health advisors for the frailty of vulnerable older populations

Acronym
NurVisitCare+CHA

Study objectives

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 15/12/2025, Korea University Institutional Review Board (Korea University Research Center, Anam-dong, Seongbuk-gu, Seoul, 02841, Korea, South; +82-02-3290-1137; kuirb@korea.ac.kr), ref: IRB-2025-0344

Primary study design
Interventional

Allocation
Non-randomized controlled trial

Masking
Open (masking not used)

Control
Active

Assignment
Parallel

Purpose
Health services research, Prevention

Study type(s)

Health condition(s) or problem(s) studied
Frailty prevention among the community-dwelling elderly population with frailty risk

Interventions
Current interventions as of 29/06/2026:

The intervention period is 12 weeks. The procedure consists of a pre-test, an intervention, and a post-test.
1. Pre-testing is conducted on frail elderly participants. Pre-testing is administered face-to-face to both the control, NurVisitCare, and NurVisitCare+CHA groups. Pre-testing includes measurements of weight, height, grip strength, and blood pressure.

2. The NurVisitCare+CHA intervention will last 12 weeks.
The control group will receive regular home health care as usual.
The NurVisitCare group will receive a total of 8 'NurVisitCare programs' for frail elderly people over 12 weeks. Four sessions will be 60-90 minutes of home visits and four sessions will be 20-30 minutes of telephone consultations, and the number of visits will be flexibly adjusted up to 8 sessions depending on the condition of the participants. The contents of the "NurVisitCare program" are as follows. Each home visiting session is 60-90 minutes long and is divided into customized health education (30-60 minutes) and physical activity sessions (30 minutes). Customized health education provides an integrated educational program that includes education and practice to prevent the physical, psychological and social aspects of frailty. Physical activity session consists of stretching, simple strength training, and functional walking exercises that frail elderly people can practice indoors and minimize physical burden and risk. All exercises are individually tailored after a preliminary assessment of the participant's physical condition.
The NurVisitCare+CHA group will receive, in addition to the aforementioned NurVisitCare program, six sessions of home health management provided by community health advisors.

3. The post-test is conducted in the same manner as the pre-test, and includes a face-to-face survey and measurements of weight, height, grip strength, and blood pressure. In addition, to qualitatively assess the program’s effectiveness, focus group interviews will be conducted with approximately 16 participants from the NurVisitCare+CHA group.

For the intervention involving 108 participants, individual-level randomization will not be conducted. Instead, participants will be allocated to the Control, NurVisitCare, or NurVisitCare+CHA groups according to their pre-assigned cluster (i.e., administrative unit) under

a cluster nonrandomized controlled trial design. Enrollment will be managed to achieve the target sample distribution across the three groups.

Previous interventions as of 28/01/2026:

The intervention period is 12 weeks. The procedure consists of a pre-test, an intervention, and a post-test.
1. Pre-testing is conducted on frail elderly participants. Pre-testing is administered face-to-face to both the control, NurVisitCare, and NurVisitCare+CHA groups. Pre-testing includes measurements of weight, height, grip strength, and blood pressure.

2. The NurVisitCare+CHA intervention will last 12 weeks.
The control group will receive regular home health care as usual.
The NurVisitCare group will receive a total of 8 'NurVisitCare programs' for frail elderly people over 12 weeks. Four sessions will be 60-90 minutes of home visits and four sessions will be 20-30 minutes of telephone consultations, and the number of visits will be flexibly adjusted up to 8 sessions depending on the condition of the participants. The contents of the "NurVisitCare program" are as follows. Each home visiting session is 60-90 minutes long and is divided into customized health education (30-60 minutes) and physical activity sessions (30 minutes). Customized health education provides an integrated educational program that includes education and practice to prevent the physical, psychological and social aspects of frailty. Physical activity session consists of stretching, simple strength training, and functional walking exercises that frail elderly people can practice indoors and minimize physical burden and risk. All exercises are individually tailored after a preliminary assessment of the participant's physical condition.
The NurVisitCare+CHA group will receive, in addition to the aforementioned NurVisitCare program, six sessions of home health management provided by community health advisors.

3. The post-test is conducted in the same manner as the pre-test, and includes a face-to-face survey and measurements of weight, height, grip strength, and blood pressure. In addition, to qualitatively assess the program’s effectiveness, focus group interviews will be conducted with approximately 16 participants from the NurVisitCare+CHA group.

For the intervention involving 135 participants, individual-level randomization will not be conducted. Instead, participants will be allocated to the Control, NurVisitCare, or NurVisitCare+CHA groups according to their pre-assigned cluster (i.e., administrative unit) under a cluster nonrandomized controlled trial design. Enrollment will be managed to achieve the target sample distribution across the three groups.

Previous interventions:

The intervention period is 12 weeks. The procedure consists of a pre-test, an intervention, and a post-test.
1. Pre-testing is conducted on frail elderly participants. Pre-testing is administered face-to-face to both the control, NurVisitCare, and NurVisitCare+CHA groups. Pre-testing includes measurements of weight, height, grip strength, and blood pressure.

2. The NurVisitCare+CHA intervention will last 12 weeks.
The control group will receive regular home health care as usual.
The NurVisitCare group will receive a total of 8 'NurVisitCare programs' for frail elderly people over 12 weeks. Four sessions will be 60-90 minutes of home visits and four sessions will be 20-30 minutes of telephone consultations, and the number of visits will be flexibly adjusted up to 8 sessions depending on the condition of the participants. The contents of the "NurVisitCare program" are as follows. Each home visiting session is 60-90 minutes long and is divided into customized health education (30-60 minutes) and physical activity sessions (30 minutes). Customized health education provides an integrated educational program that includes education and practice to prevent the physical, psychological and social aspects of frailty. Physical activity session consists of stretching, simple strength training, and functional walking exercises that frail elderly people can practice indoors and minimize physical burden and risk. All exercises are individually tailored after a preliminary assessment of the participant's physical condition.
The NurVisitCare+CHA group will receive, in addition to the aforementioned NurVisitCare program, six sessions of home health management provided by community health advisors.

3. The post-test is conducted in the same manner as the pre-test, and includes a face-to-face survey and measurements of weight, height, grip strength, and blood pressure. In addition, to qualitatively assess the program’s effectiveness, focus group interviews will be conducted with approximately 16 participants from the NurVisitCare+CHA group.

For the intervention involving 135 participants, the randomization procedure in SPSS software will be used to allocate participants into the intervention group and control group in a 1:1:1 ratio. Randomization will be stratified by the severity of health status according to the criteria of visiting nurses at public health centers in Korea.

Intervention Type
Behavioural

Primary outcome(s)
1. Frailty measured using the Tilburg Frailty Indicator at pre- and post-intervention (baseline and 12 weeks)

Key secondary outcome(s)
1. Physical performance, nutritional status, psychological distress, loneliness, social support, self-care for frailty, and quality of life measured using questionnaires and physical measurements at pre- and post-intervention (baseline and 12 weeks)

2. Body mass index, grip strength, and blood pressure measured using physical assessment at pre- and post-intervention (baseline and 12 weeks)

Completion date
31/12/2026

Eligibility

Key inclusion criteria

1. Elderly living alone aged 65 or older and under 84 years old
2. Elderly participating in public health center programs
3. Elderly classified as at-risk frail elderly (pre-frail, 4-12 points) based on the Frailty Screening Questionnaire for Older Adults at Public health centers

Healthy volunteers allowed
No

Age group
Senior

Lower age limit
65 Years

Upper age limit
84 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. Elderly with severe cognitive impairment
2. Elderly with diseases that make it difficult to understand information and participate in education (including visual and hearing impairments)
3. Elderly who have been diagnosed and are currently receiving treatment for osteoporosis or osteoarthritis by a doctor
4. Elderly who experienced a fall in the past year

Date of first enrolment
09/03/2026

Date of final enrolment
15/08/2026

Locations

Countries of recruitment
Korea, South

Sponsor information

Organisation
Korea University

ROR
https://ror.org/05m1gnk07

Funder(s)

Funder type

Funder Name
National Research Foundation of Korea

Alternative Name(s)
, National Research Foundation (South Korea), NRF

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
Korea, South

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Data sharing statement to be made available at a later date