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A teamwork training programme to improve collaboration between nurses and care assistants in the care of older patients in a Chinese hospital

Submission date 28/07/2026	**Recruitment status** Not yet recruiting	[X] Prospectively registered [_] Protocol
Registration date 29/07/2026	**Overall study status** Ongoing	[_] Statistical analysis plan [_] Results
Last Edited 28/07/2026	**Condition category** Other	[_] Individual participant data [X] Record updated in last year

Plain English summary of protocol

Background and study aims

In Chinese hospitals, registered nurses often work with unlicensed assistive personnel, also referred to as care assistants, when providing daily care for older patients. Unclear role boundaries, incomplete communication, and difficulties with task coordination may affect teamwork and the quality of care. This study will evaluate a teamwork training programme designed for registered nurses who work with care assistants in the care of older hospitalised patients.

Who can participate?

Registered nurses from Qionghai People's Hospital in Hainan Province, China, who provide care for older patients, have worked continuously in their current position for at least 6 months, have experience of working with care assistants, are able to complete the training and assessments, and provide written informed consent.

What does the study involve?

After completing a baseline questionnaire, participants will be randomly allocated to one of two groups in a 1:1 ratio. The intervention group will continue to receive routine hospital training and management and will also take part in a four-week teamwork programme. The programme will include one 60 to 90 minute session per week and will cover team structure, role boundaries, task handover and delegation, communication and feedback, situation monitoring, and mutual support. Sessions will include short lectures, case discussions, simulation-based activities, reflection, and feedback.

The control group will continue to receive routine hospital training and management during the study period. Participants in the control group will be offered access to the teamwork training after the follow-up assessment.

Both groups will complete questionnaires before randomisation, immediately after the 4-week

programme, and 4 weeks after the programme ends. The main outcome is nurses' teamwork. Other outcomes include role ambiguity and delegation readiness. Nurses in the intervention group will also report how acceptable, appropriate, and feasible they consider the programme.

What are the possible benefits and risks of participating?
There is no guaranteed direct benefit from taking part. Nurses in the intervention group may gain knowledge and skills related to teamwork, communication, role clarification, and delegation. The study involves a low-risk educational programme and questionnaires. Possible inconveniences include the time required, mild fatigue, or minor psychological discomfort. Participants may stop at any time without any effect on their employment, training opportunities, or workplace relationships.

Where is the study run from?
Qionghai People's Hospital (China)

When is the study starting and how long is it expected to run for?
January 2027 to May 2027

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
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Contact information

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Additional identifiers

Institutional study reference number assigned by Hanyang University, Republic of Korea
HYU-2026-263

Study information

Scientific Title
Effectiveness and implementation of an EPIS-informed teamwork intervention versus routine hospital training and management for improving teamwork, reducing role ambiguity, and enhancing delegation readiness among registered nurses collaborating with unlicensed assistive personnel in the care of older adults in China: a single-centre, two-arm, parallel-group randomised controlled trial

Study objectives
The primary objective of this study is to evaluate whether an EPIS-informed, nurse-targeted teamwork intervention improves nurses' teamwork compared with routine hospital training and management among registered nurses providing care for older patients in a Chinese public tertiary hospital.

The secondary objectives are to evaluate the effects of the intervention on nurses' role ambiguity and delegation readiness. The study will also assess the acceptability, appropriateness, and feasibility of the intervention among participants in the intervention group. Process evaluation will examine attendance, intervention completion, intervention delivery, protocol deviations, session feedback, open-ended comments, and possible contamination between the intervention and control groups.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 22/07/2026, Hanyang University Institutional Review Board (Research Ethics and Security Center, Room 418, Hanyang Institute of Technology, Hanyang University, 222 Wangsimni-ro, Seongdong-gu, Seoul, 04763, Korea, South; +82 (0)2 2220 0673; irb@hanyang.ac.kr), ref: HYUIRB-202607-027

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Active

Assignment
Parallel

Purpose
Health services research

Study type(s)

Health condition(s) or problem(s) studied
Nursing teamwork and healthcare service delivery in the care of older hospitalised patients, focusing on teamwork between registered nurses and unlicensed assistive personnel, role ambiguity, and delegation readiness

Interventions
After providing written informed consent and completing the baseline assessment, 104 eligible registered nurses will be randomly allocated to the intervention group or control group in a 1:1 ratio. Block randomisation will be used. An independent researcher who is not involved in participant recruitment, baseline assessment, data collection, or intervention delivery will generate the allocation sequence using a computer-generated randomisation procedure. Allocation will be concealed using sequentially numbered, opaque, sealed envelopes, which will be opened only after completion of the baseline assessment.

Participants allocated to the intervention group will receive the hospital's routine training and management together with a 4-week nurse-targeted teamwork intervention. The intervention will consist of one session per week for four consecutive weeks, with each session lasting approximately 60 to 90 minutes. The core components will include team structure, role boundaries, task handover and delegation, communication and feedback, situation monitoring, and mutual support. The sessions will combine brief lectures, case discussions, simulation-based activities, situational reflection, and feedback. The intervention will be delivered by researchers or research team members who have received standardised training and will follow a standardised intervention manual and session flow sheet.

Participants allocated to the control group will continue to receive routine hospital training and management and will not receive the study-specific teamwork intervention during the study period. Routine training and management may include induction training, continuing education, patient safety and basic nursing education, older patient care education, routine workflow guidance, clinical teaching, and nursing management support. Participants in the control group will be offered delayed access to the teamwork training after completion of the follow-up assessment.

Both groups will complete assessments at baseline before randomisation, immediately after completion of the 4-week intervention, and 4 weeks after completion of the intervention. The total participation period for each participant will be approximately 8 weeks.

Intervention Type
Behavioural

Primary outcome(s)
1. Nurses' teamwork level measured using the 35-item TeamSTEPPS Teamwork Perceptions Questionnaire (T-TPQ) at T0, before randomisation; T1, immediately after completion of the 4-week intervention; and T2, 4 weeks after completion of the intervention

Key secondary outcome(s)
1. Role ambiguity measured using the 6-item Role Ambiguity subscale of the Nursing Role Conflict and Role Ambiguity Scale at T0, before randomisation; T1, immediately after completion of the 4-week intervention; and T2, 4 weeks after completion of the intervention

2. Delegation readiness measured using the 15-item Nurse Delegation Readiness Scale at T0, before randomisation; T1, immediately after completion of the 4-week intervention; and T2, 4 weeks after completion of the intervention

3. Intervention acceptability measured using the Acceptability of Intervention Measure (AIM) at T1, immediately after completion of the 4-week intervention, and T2, 4 weeks after completion of the intervention, among participants in the intervention group

4. Intervention appropriateness measured using the Intervention Appropriateness Measure (IAM) at T1, immediately after completion of the 4-week intervention, and T2, 4 weeks after completion of the intervention, among participants in the intervention group

5. Intervention feasibility measured using the Feasibility of Intervention Measure (FIM) at T1, immediately after completion of the 4-week intervention, and T2, 4 weeks after completion of the intervention, among participants in the intervention group

Completion date
31/05/2027

Eligibility

Key inclusion criteria
Participants will be eligible if they:
1. Are registered nurses aged 18 years or older, of any sex
2. Provide care primarily to older patients, or work in wards responsible for older patient care, at Qionghai People’s Hospital, Hainan Province, China
3. Have worked continuously in their current position for at least 6 months
4. Have practical experience in patient care or routine collaboration with unlicensed assistive personnel
5. Are able to understand the intervention content and complete the training, questionnaire assessments, and follow-up evaluations
6. Understand the purpose of the study, voluntarily agree to participate, and provide written informed consent

Healthy volunteers allowed
Yes

Age group
Mixed

Lower age limit
18 Years

Upper age limit
120 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
Participants will be excluded if they:
1. Are currently not on duty, or are expected to be unable to complete the full intervention process because of leave, ward rotation, external training, temporary reassignment, resignation, or extended absence
2. Are unable to participate in the intervention, questionnaire assessments, or follow-up evaluations because of physical or psychological reasons
3. Are currently participating in training programmes or related studies involving teamwork, communication, delegation, or collaboration with unlicensed assistive personnel that may affect the outcomes of this study

Date of first enrolment
04/01/2027

Date of final enrolment
28/02/2027

Locations

Countries of recruitment
China

Study participating centre
Qionghai People's Hospital
Qionghai
China

Sponsor information

Organisation
Hanyang University

ROR
https://ror.org/046865y68

Funder(s)

Funder type

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available