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Effectiveness of a structured educational intervention on registered nurses' knowledge, attitudes, and practices toward adherence to pressure injury prevention

Submission date
19/12/2025

Recruitment status
No longer recruiting

Registration date
05/01/2026

Overall study status
Completed

Last Edited
26/05/2026

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Principal investigator, Public, Scientific

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Study information

Scientific Title

Effectiveness of a structured educational intervention on registered nurses’ knowledge, attitudes, and practices toward adherence to pressure injury prevention: a two-arm randomized controlled trial

Study objectives
To assess the efficacy of a structured, evidence-based educational intervention on registered nurses' performance in pressure injury prevention relative to regular education.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 01/07/2025, Institutional Review Board of Prince Sultan Military Medical City (Saudi Arabia, Riyadh, 11411, Saudi Arabia; +966 546668220; ethical@psmmc.med.sa), ref: E-2601

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Placebo

Assignment
Parallel

Purpose
Prevention

Study type(s)

Health condition(s) or problem(s) studied
Registered nurses’ knowledge, attitudes, and practices toward adherence to pressure injury prevention

Interventions
This study used a parallel-group, two-arm randomized controlled trial (RCT) to assess the efficacy of a structured educational intervention on registered nurses' knowledge, attitudes, and practices (KAP) regarding adherence to pressure injury prevention (Asiri et al., 2025). Nurses who met the eligibility criteria were randomly assigned in a 1:1 ratio to either an intervention group, which received a comprehensive, evidence-based program for pressure injury prevention education, or a control group, which received routine instruction (Houser & Oja, 2025; Potter et al., 2025). Randomization was performed using a computer-generated random sequence, with allocation concealment ensured by sequentially numbered, opaque, sealed envelopes (Clark et al., 2021). Participant blinding was impractical given the characteristics of the educational intervention; however, outcome evaluation and data analysis were conducted using standardized protocols to reduce bias (Melnyk & Morrison-Beedy, 2018). The outcomes were

assessed at baseline for the intervention group and weekly for the routine group using validated instruments that evaluated knowledge, attitudes, and practices related to adherence to pressure injury prevention (Melnyk & Morrison-Beedy, 2018). The trial was executed in compliance with Good Clinical Practice standards and is documented in accordance with the CONSORT guidelines for randomized controlled trials (Hopewell et al., 2025).

Intervention Type
Other

Primary outcome(s)
1. Nurses' adherence to pressure injury prevention measured using a validated adherence questionnaire (QARPPU) at baseline and immediately post-intervention

Key secondary outcome(s)
1. Nurses' knowledge of pressure injury prevention measured using the Pressure Ulcer Knowledge Assessment Tool (PUKAT-2) at baseline and immediately post-intervention

2. Nurses' self-reported pressure injury prevention practices measured using the Practice questionnaire (Thomas & Nain, 2023) at baseline and immediately post-intervention

Completion date
01/12/2025

Eligibility

Key inclusion criteria
1. Registered nurses who delivered direct patient care in the participating units
2. Minimum of one year of clinical experience in the nursing department of the same facility
3. Nurses are prepared to grant informed consent

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
22 Years

Upper age limit
60 Years

Sex
All

Total final enrolment
222

Key exclusion criteria

1. On prolonged leave during the research duration
2. Intended to relocate from the unit during subsequent evaluation
3. Had undergone similar organized pressure injury prevention training during the last six months
4. Did not provide direct care to patients

Date of first enrolment
15/07/2025

Date of final enrolment
15/07/2025

Locations

Countries of recruitment
Saudi Arabia

Study participating centre
Prince Sultan Military Medical City
Saudi Arabia
Riaydh
Saudi Arabia
11411

Sponsor information

Organisation
King Saud University

ROR
https://ror.org/02f81g417

Funder(s)

Funder type

Funder Name
King Saud University

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		25/05/2026	26/05/2026	Yes	No