INPLASY

The Effect of Augmented Reality Programs on Nursing Students' Knowledge

INPLASY202590102
doi: 10.37766/inplasy2025.9.0102
Received: 25 September 2025
Published: 25 September 2025

Lee, M; Lee, Y; Ban, S.

Corresponding author:
Seon Ban

elli2378@hanmail.net

Author Affiliation:
Nursing.

ADMINISTRATIVE INFORMATION

Support - National Research Foundation of Korea.

Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202590102

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 September 2025 and was last updated on 25 September 2025.

INTRODUCTION

Review question / Objective The Effect of Augmented Reality Programs on Nursing Students' Knowledge.

Condition being studied We aim to analyze the effectiveness of AR programs by examining their impact on nursing students' knowledge and skills. We plan to conduct a systematic literature review and meta-analysis.

METHODS

Search strategy "AR", "Nursing". "Student.

Participant or population Nursing student.

Intervention AR Program.

Comparator Control group.

Study designs to be included RCT.

Eligibility criteria An augmented reality program provided to nursing students, conducted through RCt.

Information sources We aim to analyze the effectiveness of AR programs by examining their impact on nursing students' knowledge and skills. We plan to conduct a systematic literature review and meta-analysis.

Main outcome(s) Knowledge.

Quality assessment / Risk of bias analysis ROB.

Strategy of data synthesis Revman.

Subgroup analysis Cotrol group.

Sensitivity analysis The quality of the selected studies was assessed using the Cochrane

Collaboration's tool for assessing the risk of bias in randomized trials [Risk of bias (RoB) 2.0](Higgins et al., 2023; Kim et al., 2012). RoB 2.0 consists of five areas: “Randomization process”, “Deviations from the intended interventions”, “Missing outcome data”, “Measurement of the outcome”, and “Selection of the reported result”, and risk outcomes are “a low risk of bias”, “a high risk of bias”, or “Some concerns” (Higgins et al., 2023). Studies were graded as follows: (1) “a low risk of bias” if all domains were judged to be at a low risk of bias; (2) “some concern” if at least one domain was judged to raise some concerns but no domain was at high risk of bias; and (3) “a high risk of bias” if at least one domain was at high risk of bias or there were some concerns in multiple domains that would be expected to substantially reduce our confidence in the results(Higgins et al., 2023). The quality of the selected studies was assessed independently by one researcher and two nursing professors. If there was a difference in the quality assessment results, the studies were re-examined and a meeting was held to reach an agreement.

Country(ies) involved South korea.

Keywords "AR", "Nursing Student", "RCT".

Contributions of each author

Author 1 - Misoon Lee.
Email: elli2378@hanmail.net
Author 2 - Youngsuk Lee.
Author 3 - Seonhwa Ban.
Email: elli2378@hanmail.net