Abstract

Introduction: Palliative care education is a critical component of nursing training. Employing innovative teaching methods, such as mobile-based flashcards and educational videos, can enhance both knowledge acquisition and retention. This study aimed to compare the effectiveness of mobile-based flashcards and educational videos on the retention of palliative care knowledge, with a focus on cancer-related fatigue, and to evaluate nursing students' satisfaction with these methods.

Methodology: A quasi-experimental, pretest-posttest design was used, involving 57 sixth-semester undergraduate nursing students from two faculties in Khorramabad and Borujerd. Participants were non-randomly assigned to either the mobile-based flashcard group (n=32) or the educational video group (n=25). Knowledge levels were assessed before, immediately after, and one month post-intervention using a multiple-choice test. Student satisfaction was evaluated via a semi-structured questionnaire with open-ended questions during face-to-face interviews. Feedback regarding effectiveness, practicality, strengths, and weaknesses of each method was collected and analyzed. Data were managed and analyzed using SPSS version 25 with independent t-tests, repeated measures ANOVA, and repeated measures ANCOVA.

Findings: Pre-intervention knowledge scores did not differ significantly between groups. Both groups demonstrated significant improvement in post-intervention scores compared to pretest ($P<0.05$). One month after the intervention, the mobile-based flashcard group achieved higher knowledge retention than the video group (8.46 ± 2.63 vs. 6.48 ± 2.50, $P=0.006$). Although the interaction between intervention type and time was not statistically significant, time alone had a significant effect. Students reported satisfaction with both methods, with some expressing preference for one method over the other, reflecting their effectiveness and applicability in practical learning.

Discussion and conclusion: Both mobile-based flashcards and educational videos enhanced nursing students' knowledge of palliative care. Mobile-based flashcards, due to their facilitation of spaced repetition, were particularly effective

in consolidating learning. These findings suggest that mobile-based flashcards can serve as a technological learning tool to promote knowledge retention across various nursing courses. It is recommended to implement both methods over extended periods and across diverse theoretical and clinical subjects.

Key words: Electronic Flashcard‹ Nursing Students‹ Videoe‹ Palliative Care‹ Satisfaction‹ knowledge