

Does this evidence answer the EBP question?

☒ Yes → Continue appraisal

☐ No → STOP, do not continue evidence appraisal

Article Summary Information

Article Title: **Tailoring fall prevention videos for medical-surgical inpatients: A randomized controlled trial.**

Author(s): **Twibell et al.**

Number: 1

Population, size, and setting: **124 patients in a teaching hospital in the mid-western U.S.**

Publication date:
2023

Complete after appraisal

Evidence level and quality rating: **Level 1B evidence**

Study findings that help answer the EBP question:

In 2023, Twibell et al. published findings of their study aimed at reducing the incidence of in-patient falls by using tailored fall prevention videos produced at an affiliated university. These researchers compared a control group (n=64) who received standard falls prevention education to an intervention group of subjects (n=60) who were shown a three-minute video about falls prevention.

The results showed that after viewing the video, the intervention group had fewer falls, although the number was not statistically significant. The video intervention group did, however, show reduced high-risk fall behaviors and improved perceptions of fall-related behaviors. The researchers stated that the findings supported using fall prevention videos tailored to age and gender. Although this was a randomized controlled trial with a sufficient sample size, the subjects were from a single hospital and were mostly white. The researchers noted that this limits the generalizability of findings.

Based on the *Johns Hopkins Evidence-Based Practice Model for Nurses* (Dang et al, 2022), this very well conducted randomized controlled trial yielded Level 1B evidence that can be generalized with some caution.

References

Dang, D., Dearholt, S., Bissett, K., Ascenzi, J., & Whalen, M. (2022). *Johns Hopkins evidence-based practice for nurses and healthcare professionals: Model and guidelines*. 4th ed. Sigma Theta Tau International.

Twibell, K. R., Delaney, L., Siela, D., Coers, G., Davis, C., Drown, C., Kring, K., Duncan, J., & Jones, J. (2023). Tailoring fall prevention videos for medical-surgical Inpatients: A randomized controlled trial. *MEDSURG Nursing*, 32(3), 170–178.

Section I: QuaNtitative Appraisal

A

Is this a report of a single research study?

☒ Yes → Continue to decision tree

☐ No → Go to Section I: B

Level	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <pre> graph TD Q1[Was there manipulation of an independent variable] -- Yes --> Q2[Was there a control group] Q1 -- No --> L3[Level III (Nonexperimental)] Q2 -- Yes --> Q3[Were study participants randomly assigned to the intervention and control groups?] Q2 -- No --> L2[Level II (Quasi-experimental)] Q3 -- Yes --> L1[Level I (Randomized Control Trial; RCT)] Q3 -- No --> L2 </pre> </div> <div style="width: 35%;"> <p>Level I studies include randomized control trials (RCTs) or experimental studies</p> <p>Level II studies have some degree of investigator control and some manipulation of an independent variable but lack random assignment to groups and may not have a control group</p> <p>Level III studies lack manipulation of an independent variable; can be descriptive, comparative, or correlational; and often use secondary data</p> </div> </div>			
Quality	After determining the level of evidence, determine the quality of evidence using the considerations below:			
	Does the researcher identify what is known and not known about the problem?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Does the researcher identify how the study will address any gaps in knowledge?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Was the purpose of the study clearly presented?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Was the literature review current (most sources within the past five years or a seminal study)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Was the sample size sufficient based on the study design and rationale?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	If there is a control group: <ul style="list-style-type: none"> Were the characteristics and/or demographics similar in both the control and intervention groups? If multiple settings were used, were the settings similar? Were all groups equally treated except for the intervention group(s)? 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A
	Are data collection methods described clearly?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Were the instruments reliable (Cronbach's α [alpha] ≥ 0.70)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Was instrument validity discussed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	If surveys or questionnaires were used, was the response rate $\geq 25\%$?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Were the results presented clearly?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	If tables were presented, was the narrative consistent with the table content?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Were study limitations identified and addressed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Were conclusions based on results?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Section I: QuaNtitative Appraisal (continued)				
	Circle the appropriate quality rating below:			

Quality	<p>A High quality: Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on a comprehensive literature review that includes thorough reference to scientific evidence.</p> <p>B Good quality: Reasonably consistent results; sufficient sample size for the study design; some control; fairly definitive conclusions; reasonably consistent recommendations based on a fairly comprehensive literature review that includes some reference to scientific evidence.</p> <p>C Low quality: Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn.</p>
Record findings that help answer the EBP question on page 1	