End Stage Retention Disease (ESRD) When Re-Watching Lectures Does Not Improve Long-Term Retention

Shannon Palmer, PharmD Candidate, Youn Chu, PharmD Candidate, Adam Persky PhD
UNC Eshelman School of Pharmacy, University of North Carolina, Chapel Hill, NC

TAKE HOME POINTS

Objective: To assess the relative effectiveness of re-watching a class recording vs. retrieval practice as a learning strategy after students attended a class session on the material.
1. Re-watching lecture did not lead to greater retention than retrieval practice (testing)
2. Testing is more cost-effective than re-watching lecture
3. Students perceive re-watching lecture as an effective strategy

WHY did we do this study?

- Students have found value in re-watching videos as a method to prepare for final exams.¹
- Retrieval practice, otherwise called the testing effect, has been found to be better at improving long-term retention compared to rereading.²

HOW did we do this study?

1. 1st year student pharmacists in pharmacokinetics
2. Attend lectures on Topic A and Topic B n=102
3. Restudy from lecture on Topic A n=49
4. Restudy from lecture on Topic B Answer learning objectives for Topic A n=53
5. Complete quiz on Topics A and B n=51
6. Complete a mock quiz n=51
7. 1 week later
8. Restudy from lecture on Topic A Answer learning objectives for Topic B n=49
9. Complete quiz on Topics A and B n=102

WHAT did we find?

Do students perform differently on measures of long-term retention when they Restudy or Test?

- Restudy 56%
- Test 53%
- No difference at 1 week between restudy and testing

What strategy is most cost-effective for long-term retention of knowledge?

- Restudy 82%
- Test 43%

Do students have different perceptions on the effectiveness of Restudy or Testing?

- Students feel restudy is more effective than testing

WHY do we think this is important?

- Students view re-watching lecture as an effective learning strategy
- Re-watching lecture may result in high immediate effects but does not promote long-term retention
- Students may view effective learning strategies as ones that provide high immediate performance or that feel like they are learning
- Re-watching lecture takes more time and delivers similar results to testing making it less cost-effective for students
- Students are balancing increasingly busy schedules and should utilize study strategies that impact long-term retention with the least time commitment

WHAT can instructors do?

1. Encourage students to self-test after study
2. Provide opportunities for students to retrieve information from memory
3. Provide information to students on successful study strategies for long-term retention

REFERENCES

1. Davies TL, Cotton VK, Korte L. Student Usage And Perceptions Of The Value Of Recorded Lectures In A Traditional Face-To-Face (F2F) Class, J College Teach Learn 2016;13(3):85.