

Case-based curriculum with peer-assisted learning can improve knowledge retention in multidisciplinary pain medicine training

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BACKGROUND

Comprehensive information addressing how to best incorporate trainees with diverse prior training in a multidisciplinary subspecialty fellowship is lacking.

CURRICULUM DEVELOPMENT



With a novel **note-taking and knowledge-sharing format**, utilizing a **case-based curriculum**, we created a collaborative learning environment that **promotes knowledge sharing**, allows for **better knowledge retention**, and **fosters respect** between trainees.

NOTE-TAKING EXERCISE

Prior knowledge that is accurate and relevant	Prior knowledge that is inaccurate
New knowledge gained from peers (may be prior knowledge of other trainees)	New knowledge for all trainees

SHARE one item at the end of each session with group.
"I learned from [trainee x] about xxx."

After each case-study, all participants are given homework based on each session's learning objective to reinforce or correct prior knowledge and to build upon their knowledge base.

POST IMPLEMENTATION SURVEY RESULT

Q1: *I enjoy the format of the case-based learning more than the traditional lecture format.*



Q2: *The discussions during the case-based learning curriculum improved my knowledge base.*



Q3: *I learned valuable knowledge from my peers during the case-based discussions.*



Q4: *I retained more useful knowledge through participating in the case-based learning sessions compared to attending the traditional lecture format.*



■ Neither agree nor disagree ■ Agree ■ Strongly agree

DISCUSSION

This case-based curriculum incorporating peer-teaching was not only perceived as more effective than traditional lecture formats, but it was also reportedly more enjoyable for learners. Collectively, these findings suggest that implementing a case-based peer-assisted learning curriculum is an effective way to introduce complicated medical knowledge to multidisciplinary trainees. These encouraging results have important implications for advanced medical education that can be applied to other multidisciplinary specialties.