# Online teaching

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- The Use of Social Media for Student-led Initiatives in Undergraduate Medical Education: A Cross-sectional Study
- Society of MYND (Mentorship of Young Neurosurgical Doctors): a project for the ongoing education of junior faculty pediatric neurosurgeons
- A cross-sectional survey about behavior of wearing condoms among college students who engage in sexual activity: the mediating role of attitudes of preventive behavior
- Neuro-anaesthesia training in Pakistan: Evaluating the need for a dedicated fellowship program
- Construction and validation of a prognostic nomogram model integrating machine learning-pathomics and clinical features in IDH-wildtype glioblastoma
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- Teleneurosurgery between Greenland and Denmark

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Online teaching has been confirmed as an effective method for maintaining educational quality in many courses. However, it remains unclear whether the teaching effectiveness of face-to-face teaching can be achieved in neurosurgery clinical courses.

Shen et al. aim to analyze the effect of online teaching on neurosurgery by comparing it with traditional face-to-face teaching and investigating the students' willingness to engage with online teaching, as well as their evaluations of this mode of teaching.

They randomly selected three classes of fourth year medical students who received online teaching and three classes of fourth year medical students who received face-to-face teaching. After completing the neurosurgery curriculum, the study examined the differences between the two groups in terms of satisfaction with the course, theoretical knowledge, and clinical practice abilities, which included medical history inquiry, physical examination, diagnosis, and treatment. In the online teaching setting, a survey was conducted to assess the students' willingness to accept online teaching and to identify its shortcomings.

The self-evaluation items included learning motivation, learning more targeted and more interestingly, clinical thinking ability, clinician-patient communication skills, and teamwork skills. All of these aspects were significantly better in the face-to-face group compared to the online group. Each item's score for clinical practice abilities in the face-to-face group was notably higher than that of the online group. Students' satisfaction with and evaluation of the effectiveness of online teaching were lower than those of face-to-face teaching. The primary drawback of online teaching is the lack of a traditional classroom atmosphere, followed by limited interaction with teachers and classmates.

The face-to-face group had better self-evaluation and clinical practice abilities than the online group. Additionally, students expressed a preference for face-to-face teaching of neurosurgery clinical courses. The absence of a traditional classroom atmosphere is the main drawback of online teaching. Therefore, online teaching cannot completely replace traditional face-to-face teaching in neurosurgery clinical courses [1)]

While this study provides valuable insights, its limitations suggest that online neurosurgery education should not be dismissed but rather optimized. With the right technological advancements and pedagogical strategies, online teaching can complement, though not completely replace, face-to-face instruction in neurosurgery.

1)
Shen J, Zhang S, Sun D, Ge R, Chen S, Fang J, An Q. Comparison of face-to-face teaching and online teaching in neurosurgery education for medical students. BMC Med Educ. 2025 Feb 13;25(1):232. doi: 10.1186/s12909-025-06817-4. PMID: 39948596.