

## REFERENCES

- Aaraj, S., Farooqui, F., Saeed, N. and Khan, S. (2021). Impact of COVID Pandemic and Hybrid teaching on Final year MBBS students' End of clerkship Exam performance. *Pakistan Journal of Medical Sciences*, 38(1). doi:<https://doi.org/10.12669/pjms.38.1.4645>.
- Al-Elq, A.H. (2007) 'Journal of Family Medicine & Community Health', *MEDICINE AND CLINICAL SKILLS LABORATORIES*, pp. 59–63. doi:[10.47739/familymedicine](https://doi.org/10.47739/familymedicine).
- Aldridge, M.D. and McQuagge, E. (2021). 'Finding My Own Way:' The Lived Experience of Undergraduate Nursing Students Learning Psychomotor Skills During COVID-19. *Teaching and Learning in Nursing*, 16(4). doi:<https://doi.org/10.1016/j.teln.2021.07.002>.
- Althwanay, A. *et al.* (2020) 'Medical Education, pre- and post-pandemic era: A review article', *Cureus* [Preprint]. doi:[10.7759/cureus.10775](https://doi.org/10.7759/cureus.10775).
- Berdida, D.J.E., Elero, F.S.L., Donato, M.F.T., Dungo, Ma.K.S., Dunque, N.I.O., Dy, K.J.E., Elarmo, R.A.G.F., Espineli, J.M.B. and Espineli, V.J.G. (2022). Filipino Nursing Students' Use of Low-cost Simulators During the COVID-19 Pandemic: A Summative Content Analysis of YouTube Videos. *Teaching and Learning in Nursing*. [online] doi:<https://doi.org/10.1016/j.teln.2022.08.003>.
- Bosse, H.M., Mohr, J., Buss, B., Krautter, M., Weyrich, P., Herzog, W., Jünger, J. and Nikendei, C. (2015). The benefit of repetitive skills training and frequency of expert feedback in the early acquisition of procedural skills. *BMC Medical Education*, [online] 15(1). doi:<https://doi.org/10.1186/s12909-015-0286-5>.
- Brannick, M.T., Erol-Korkmaz, H.T. and Prewett, M. (2011) 'A systematic review of the reliability of objective structured clinical examination scores', *Medical Education*, 45(12), pp. 1181–1189. doi:[10.1111/j.1365-2923.2011.04075.x](https://doi.org/10.1111/j.1365-2923.2011.04075.x).
- Carr, S.J. (2004) 'Assessing clinical competency in Medical Senior house officers: How and why should we do it?', *Postgraduate Medical Journal*, 80(940), pp. 63–66. doi:[10.1136/pmj.2003.011718](https://doi.org/10.1136/pmj.2003.011718).
- Chisnall, B., Vince, T., Hall, S. and Tribe, R. (2015). Evaluation of outcomes of a formative objective structured clinical examination for second-year UK medical students. *International Journal of Medical Education*, 6, pp.76–83. doi:<https://doi.org/10.5116/ijme.5572.a534>.

- Enoch, L.C., Abraham, R.M. and Singaram, V.S. (2023). Factors That Enhance and Hinder the Retention and Transfer of Online Pre-Clinical Skills Training to Facilitate Blended Learning. *Advances in medical education and practice*, Volume 14, pp.919–936. doi:<https://doi.org/10.2147/amep.s398376>.
- Faghihi, A. (2020) ‘The influential factors in the performance of medical students in the clinical competency exam: A qualitative study’, *Educational Research in Medical Sciences*, 9(1). doi:10.5812/erms.104620.
- Fitzgerald, D.A., Scott, K.M. and Ryan, M.S. (2021). Blended and e-learning in pediatric education: harnessing lessons learned from the COVID-19 pandemic. *European Journal of Pediatrics*. doi:<https://doi.org/10.1007/s00431-021-04149-1>.
- Gupta, P., Dewan, P. and Singh, T. (2010) ‘Objective structured clinical examination (OSCE) revisited’, *Indian Pediatrics*, 47(11), pp. 911–920. doi:10.1007/s13312-010-0155-6.
- Harden, R.M. *et al.* (1975) ‘Assessment of clinical competence using objective structured examination.’, *BMJ*, 1(5955), pp. 447–451. doi:10.1136/bmj.1.5955.447.
- Harden, R.M., Lilley, P. and Patricio, M. (2016) ‘Chapter 1 What is an OSCE?’, in *The Definitive Guide to the OSCE: The objective structured clinical examination as a performance assessment*. Edinburgh: Elsevier.
- Harden, R.M., Lilley, P. and Patricio, M. (2016) *The Definitive Guide to the OSCE the objective structured clinical examination as a performance assessment*. Edinburgh: Elsevier.
- Herrmann-Werner, A., Erschens, R., Ziphel, S. and Festi-Wietek, T. (2022). *Where there are challenges, there are opportunities: An undergraduate medical students’ teaching concept for mental health in times of COVID-19*. [online] Pubmed Central. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9648749/> [Accessed 10 Aug. 2024].
- Homer, M. (2022). Pass/fail decisions and standards: the impact of differential examiner stringency on OSCE outcomes. *Advances in Health Sciences Education*. doi:<https://doi.org/10.1007/s10459-022-10096-9>.
- Hui, T. *et al.* (2023) ‘Nurses’ clinical competency and its correlates: Before and during the covid-19 Outbreak’, *BMC Nursing*, 22(1). doi:10.1186/s12912-023-01330-9.

- Hurrell, D. (2021). Conceptual Knowledge OR Procedural Knowledge or Conceptual Knowledge AND Procedural Knowledge: Why the Conjunction is Important to Teachers. *Australian Journal of Teacher Education*, 46(2), pp.57–71. doi:<https://doi.org/10.14221/ajte.2021v46n2.4>.
- Hynes, H. (no date) *Standard setting for Osces - University College Cork*. Available at:<https://www.ucc.ie/en/media/academic/schoolofmedicine/docs/meu/StandardSettingforOSCEs.pdf>
- iDesign (no date) *Miller’s Pyramid of Clinical Competence, The iDea Book*. Available at:<https://openpress.usask.ca/ideabook/chapter/millers-pyramid-of-clinical-competence/#:~:text=Miller%27s%20pyramid%20of%20clinical%20competence%20was%20developed%20specifically%20for%20assessing,stage%20of%20the%20learning%20process> (Accessed: 28 August 2023).
- Kim, K.-J. (2016). Factors associated with medical student test anxiety in objective structured clinical examinations: a preliminary study. *International Journal of Medical Education*, 7, pp.424–427. doi:<https://doi.org/10.5116/ijme.5845.caec>.
- Loda, T. *et al.* (2022) ‘Perspectives, benefits and challenges of a live OSCE during the COVID-19 pandemic in a cross-sectional study’, *BMJ Open*, 12(6). doi:10.1136/bmjopen-2021-058845.
- Mak, V., Krishnan, S. and Chuang, S. (2022) ‘Students’ and examiners’ experiences of their first virtual pharmacy Objective Structured Clinical Examination (OSCE) in Australia during the COVID-19 pandemic’, *Healthcare*, 10(2), p. 328. doi:10.3390/healthcare10020328.
- Malau-Aduli, B.S., Jones, K., Saad, S. and Richmond, C. (2022). Has the OSCE Met Its Final Demise? Rebalancing Clinical Assessment Approaches in the Peri-Pandemic World. *Frontiers in Medicine*, 9. doi:<https://doi.org/10.3389/fmed.2022.825502>.
- Manzini, G., Maximilian Denzinger, Kornmann, M., Hines, I.N. and Kremer, M. (2022). Impact of COVID-19 on medical students` performance in surgical OSCE examination in a German University Hospital: a retrospective analysis before, during and after pandemic. *Research Square (Research Square)*. doi:<https://doi.org/10.21203/rs.3.rs-2167283/v1>.
- Marpaung, Y. (2023) “Perbandingan Perbedaan Hasil Ujian OSCE Semester 4 Antara Metode Pembelajaran Tatap Muka (Luar Jaringan) dan Dalam Jaringan (Daring) pada Mahasiswa Angkatan 2017 dan 2018 FK UMSU”, *Jurnal Ilmiah*

Maksitek, 8(1), pp. 67-71. Available at:  
<https://makarioz.sciencemakarioz.org/index.php/JIM/article/view/371>

McCoy, J. and Merrick, H.W. (2001) *The objective structured clinical examination*. The Committee.

Medina-Gaona, L.A. (2020). *View of Clinical Skills Abilities Development During COVID-19 Pandemic in Mexico City*. [online] *Ijms.info*. Available at: <https://ijms.info/IJMS/article/view/600/363> [Accessed 18 Aug. 2024].

Pérez Baena, A.V. and Sendra Portero, F. (2023) ‘The Objective Structured Clinical Examination (OSCE): Main aspects and the role of Imaging’, *Radiología (English Edition)*, 65(1), pp. 55–65. doi:10.1016/j.rxeng.2022.09.006.

Prineas, S., Mosier, K., Mirko, C. and Guicciardi, S. (2021). *Non-technical Skills in Healthcare*. [online] PubMed. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK585613/>.

Reid, S.D., Sa, B., Giddings, S., Reisha Rafeek, Singh, S., Harnarayan, P. and Niall Farnon (2023). What the COVID-19 Pandemic Taught Medical Educators in the Caribbean about Online Clinical Teaching. *International Medical Education*, 2(3), pp.219–231. doi:<https://doi.org/10.3390/ime2030021>.

Riedel, M., Amann, N., Recker, F., André Hennigs, Heublein, S., Meyer, B.-U., Karge, A., Eisenkolb, G., Lammert, J., Graf, A., Klein, E., Weiß, M. and Riedel, F. (2022). The COVID-19 pandemic and its impact on medical teaching in obstetrics and gynecology—A nationwide expert survey among teaching coordinators at German university hospitals. *PLOS ONE*, 17(8), pp.e0269562–e0269562. doi:<https://doi.org/10.1371/journal.pone.0269562>.

Roy, B. *et al.* (2018) ‘Clinical skills and its importance in undergraduate medical curriculum’, *Journal of Biomedical Sciences*, 4(1), pp. 1–2. doi:10.3126/jbs.v4i1.20570.

Saad, S. *et al.* (2023) ‘The impact of pandemic disruptions on Clinical Skills Learning for pre-clinical medical students: Implications for future educational designs’, *BMC Medical Education*, 23(1). doi:10.1186/s12909-023-04351-9.

Schwill, S., Fahrbach-Veeser, J., Moeltner, A., Eicher, C., Kurczyk, S., Pfisterer, D., Szecsenyi, J. and Loukanova, S. (2020). Peers as OSCE assessors for junior medical students – a review of routine use: a mixed methods study. *BMC Medical Education*, 20(1). doi:<https://doi.org/10.1186/s12909-019-1898-y>.

- Seymour-Walsh, A., Weber, A., Bell, A. and Smith, T. (2020). Teaching psychomotor skills online: exploring the implications of novel coronavirus on health professions education. *Rural and Remote Health*, 20(4). doi:<https://doi.org/10.22605/rrh6132>.
- Susanto, N.A., Setiawan, I.P. and Hidayah, R.N. (2022). *A Comparison of Student Performance on the Final Year OSCE for Undergraduate Medicine Program Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada Before and During the Pandemic*. [online] <http://etd.repository.ugm.ac.id/>. Available at: <https://etd.repository.ugm.ac.id/penelitian/detail/211537> [Accessed 26 Nov. 2024].
- Skrzypek, A., Perera, I., Szeliga, M. and Cebula, G. (2020). Modification of teaching during the COVID-19 pandemic at the. *FOLIA MEDICA CRACOVIENSIA*, [online] LX, pp.113–121. doi:<https://doi.org/10.24425/fmc.2020.136209>.
- Turana, Y. *et al.* (2022) ‘Impact on medical education and the medical student’s attitude, practice, mental health, after one year of the COVID-19 pandemic in Indonesia’, *Frontiers in Education*, 7. doi:10.3389/feduc.2022.843998.
- Tzeng, T.-Y., Hsu, C.-A., Yang, Y.-Y., Yuan, E.J., Chang, Y.-T., Li, T.-H., Li, C.-P., Liang, J.-F., Lirng, J.-F., Chen, T.-J., Huang, C.-C., Hou, M.-C., Chen, C.-H. and Sheu, W.H.-H. (2022). The Impact of COVID-19 Pandemic on the Learning Outcomes of Medical Students in Taiwan: A Two-Year Prospective Cohort Study of OSCE Performance. *International Journal of Environmental Research and Public Health*, [online] 19(1), p.208. doi:<https://doi.org/10.3390/ijerph19010208>.
- Wanless, S., Winterman, E. and Chapman, J. (2020). Skills teaching in COVID lockdown in the UK: lessons learnt. *Pielęgniarstwo XXI wieku / Nursing in the 21st Century*, 0(0). doi:<https://doi.org/10.2478/pielxxiw-2020-0018>.
- Wimmers, P.F. and Wimmers, P.F. (2006) ‘Chapter One Defining Clinical Competence: An Introduction’, in *Developing clinical competence: Proefschrift*. Rotterdam.
- Yang, H., Fan, Y., Chen, Z., Zhang, S., Wu, H., Hu, X., Wu, T. and Zhang, M. (2023). Constructing a diversified online neurology teaching model under the COVID-19. *Frontiers in Medicine*, 9. doi:<https://doi.org/10.3389/fmed.2022.1071414>.
- Yom, K.H., Diel, R.J. and Kemp, P.S. (2021). A Comparison of the Flipped Classroom Model for Medical Student Education in Ophthalmology before and during the COVID-19 Pandemic. *Journal of Academic Ophthalmology*, 13(02), pp.e228–e233. doi:<https://doi.org/10.1055/s-0041-1740397>.

Zayyan, M. (2011) 'Objective structured clinical examination: The Assessment of Choice', *Oman Medical journal*, pp. 219–222. doi:10.5001/omj.2011.55.