reconnect
Reconnecting relationships through technology

Improving optometry students' interpersonal skills by using telehealth technology and reconnecting with the older adult community

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Background: Interpersonal skills are crucial for successful clinician-patient interactions for optometrists, and an integral part of optometry competency standards (Kiely & Slater, 2015) and health professionals' code of conduct (AHPRA, 2022). Optometry students largely develop these skills through "in-person" interactions. One pedagogical strategy to develop students' interpersonal skills is to procure "multisource" feedback from different sources (Chandler et al., 2010, Donnon et al., 2014, Holmboe & Iobst, 2020, Stevens et al., 2018), particularly the "patient voice" (Baines et al., 2018, Bokken et al., 2010, Clever et al., 2011, Haq et al., 2006, Tattersall 2002). Patients from the community can be effectively involved in evaluating optometry students' interpersonal skills in-person (Schmid et al., 2020). Given increased demands for telehealth and e-learning, this study aimed to assess the feasibility and utility of involving older adult volunteer patients in online interaction, evaluation and feedback provision to improve optometry students' "online" interpersonal skills.

Methods: Using Zoom, 40 student optometrists participated in a structured interaction with a de-identified patient (aged 50+), which was observed by an unidentifiable teaching clinician. Patients, teachers and students provided qualitative written feedback in response to two questions: "What two things did the student do well?" and "What two things could the student improve?", and completed a modified version of the Doctors' Interpersonal Skills Questionnaire (DISQ) to quantitatively evaluate interpersonal skills. A subset of students (n=19) completed two sessions. The overall DISQ scores were compared using a repeated-measures analysis of variance (RM-ANOVA). At program conclusion, all participants were invited to complete an anonymous survey about their perceived usefulness and experience of the online activity.

Results: Patients gave higher overall ratings of students' interpersonal skills than teachers (RM-ANOVA main effect of feedback source: $F(1,38)=7.40$, $p=0.01$). For the subset of students that completed two sessions, DISQ ratings from patients, teachers and students were higher for the second compared to the first session (RM-ANOVA main effect of session: $F(1,54)=7.76$, $p=0.01$). Students agreed that patient and teacher feedback was useful (97% and 93% of responses, respectively), and that they used the feedback to improve their clinical competence (100% and 93% of responses, respectively). Patients and teachers agreed that providing feedback made them feel they were helping the student learn (100% of respondents), and found it easy to give constructive comment about how the student interacted (90% of patients, 100% of teachers). However, about one-third (35%) and more than half of the students (57%) reported feeling anxious knowing that the patient and teacher, respectively, would provide feedback, while a small proportion of patients (3%) – but not teachers – felt anxious about providing feedback to students.

Conclusions: This study demonstrates that involving older volunteers from the community in an online interaction is feasible and useful in improving optometry student's interpersonal skills. This is despite eliciting some feelings of anxiousness in students, and to a lesser degree, in patients. Using telehealth technology to reconnect with the community provides an alternative avenue by which students can improve their interpersonal skills for better patient satisfaction and quality of care.

Keywords: communication, interpersonal skills, multisource feedback, professionalism, telehealth

References

AHPRA (2022). Australian Health Practitioner Regulation Agency and National Boards Code of Conduct (revised June 2022). https://www.ahpra.gov.au/Publications/Code-of-conduct/Shared-Code-of-conduct.aspx

Baines, R., Regan de Bere, S., Stevens, S., Read, J., Marshall, M., Lalani, M., Bryce, M. & Archer, J. (2018). The impact of patient feedback on the medical performance of qualified doctors: a systematic review. *BMC Medical Education*, 18, 173. https://doi.org/10.1186/s12909-018-1277-0

Bokken, L., Rethans, J. J., Jobsis, Q., Duvivier, R., Scherpbier, A. & van der Vleuten, C. (2009). Instructiveness of real patients and simulated patients in undergraduate medical education: a randomized experiment. *Academic Medicine*, 84(7), 958-963. https://doi.org/10.1097/ACM.0b013e3181a814a3

Chandler, N., Henderson, G., Park, B., Byerley, J., Brown, W. D. & Steiner, M. J. (2010). Use of a 360-degree evaluation in the outpatient setting: the usefulness of nurse, faculty, patient/family, and resident self-evaluation. *Journal of Graduate Medical Education*, *2*(3), 430-434. https://doi.org/10.4300/jgme-d-10-00013.1

Clever, S. L., Dudas, R. A., Solomon, B. S., Yeh, H. C., Levine, D., Bertram, A., Goldstein, M., Shilkofski, N. & Cofrancesco, J. (2011) Jr. Medical student and faculty perceptions of volunteer outpatients versus simulated patients in communication skills training. *Academic Medicine*, *86*(11), 1437-1442. https://doi.org/10.1097/ACM.0b013e3182305bc0

Donnon, T., Al Ansari, A., Al Alawi, S. & Violato, C. (2014). The reliability, validity, and feasibility of multisource feedback physician assessment: a systematic review. *Academic Medicine*, *89*(3), 511-516. https://doi.org/10.1097/ACM.0000000000000147

Haq, I., Fuller, J., Dacre, J. (2006). The use of patient partners with back pain to teach undergraduate medical students. *Rheumatology*, *45*(4), 430-434. https://doi.org/10.1093/rheumatology/kei167

Holmboe, E. S. & Iobst, W. F. (2020). Accreditation Council of Graduate Medical Education Assessment Guidebook. https://www.acgme.org/globalassets/PDFs/Milestones/Guidebooks/AssessmentGuidebook.pdf

Kiely, P. & Slater, J. (2015). Optometry Australia Entry-level Competency Standards for Optometry 2014. *Clinical and Experimental Optometry*, *98*(1), 65-89. https://doi.org/10.1111/cxo.12216

Schmid, K., Hopkins, S. & Huynh, T. (2020). Involving patients in the development of interpersonal skills of optometry students. *Clinical and Experimental Optometry*, *103*(3), 361-367. https://doi.org/10.1111/cxo.12939

Stevens, S., Read, J., Baines, R., Chatterjee, A. & Archer, J. (2018). Validation of Multisource Feedback in Assessing Medical Performance: A Systematic Review. *Journal of Continuing Education in the Health Professions*, *38*(4), 262-268. https://doi.org/10.1097/CEH.0000000000000219

Tattersall, R. L. (2002). The expert patient: a new approach to chronic disease management for the twenty-first century. *Clinical Medicine Journal*, *2*(3), 227-229. https://doi.org/10.7861/clinmedicine.2-3-227

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