**OBJECTIVES**

Individuals with Intellectual and Developmental Disabilities (IDD) face unique physical and mental health needs. Yet, they are medically underserved and face numerous barriers. Furthermore, often medical professionals do not receive adequate training early in their careers serving individuals with IDD. This study aimed to address this gap by developing and implementing an Objective Structured Clinical Examinations (OSCE) with individuals with IDD as patient educators (PEs) for first and second-year medical students.

**METHODS**

This was a pilot observational study, with first- and second-year medical students (n=25), participating in a virtual OSCE with individuals with IDD as PEs. The students were recruited from the Queen’s University medical program (Kingston, Ontario, Canada). The PEs (n=5) were recruited across Ontario. Also, senior medical students and medical residents were recruited across Ontario (n=5) to assess all student-PE interactions as objective observers (OOs). The OSCE was conducted over Zoom and consisted of five virtual stations back-to-back. The stations’ simulated scenarios were prepared by our research team together with the PEs and included real PE experiences with healthcare, adjusted to ensure anonymity. Demographic information was collected from every participant in the study. During the OSCE, OOs assessed student’s performance using a Prediger scale. Prior to and following the completion of the OSCE, the students completed a self-report scale and a Prediger scale. After the OSCE, the students participated in a semi-structured interview to collect qualitative data. The demographics data and assessment scale scores (self-report scale and Prediger scale) were analyzed using descriptive statistics and effect size using Cohen D (d) analysis. The qualitative data was analyzed using NVivo with two independent reviewers. The analyzed data was used to determine whether the OSCE had a beneficial effect at improving comfort, communication skills and competency of medical students interacting with patients with IDD.

**RESULTS**

Students reported a significant large effect size (d > 0.8), comparing their post-OSCE to their pre-OSCE scores (Self-report: d = 1.96, p < 0.0001; Prediger: d = 1.34, p < 0.0001). OOs reported a significant large effect size when comparing their assessments to the students’ pre- and post-OSCE Prediger scores (pre-OSCE: d = 1.86, p < 0.0001; post-OSCE: d = 0.79, p = 0.0013). Prior to this OSCE, 80% of students reported not having an experience interacting with a person with IDD. Qualitative analysis yielded the following common themes: positive experience, perspective changes, and development of personal awareness.

**DISCUSSION/CONCLUSIONS**

Most medical students reported not having experiences interacting with individuals with IDD. As a results, these students tended to rate their skills much lower, compared to the ratings provided by more experienced medical trainees (OOs). Then after the OSCE, these students rated themselves significantly higher and reflected positively on this experience, mentioning several self-realizations and changes in perspective. Thus, this study should encourage educators, curriculum developers and researchers to include individuals with IDD into medical education. This is a necessary change because of the unique experiences of individuals with IDD which cannot be accurately portrayed by other populations.

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