Enhancing Medical Student Competency and Attitudes Through Co-Designed Intellectual and Developmental Disabilities (IDD) Curricula: A Multi-Site Program Evaluation

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Introduction

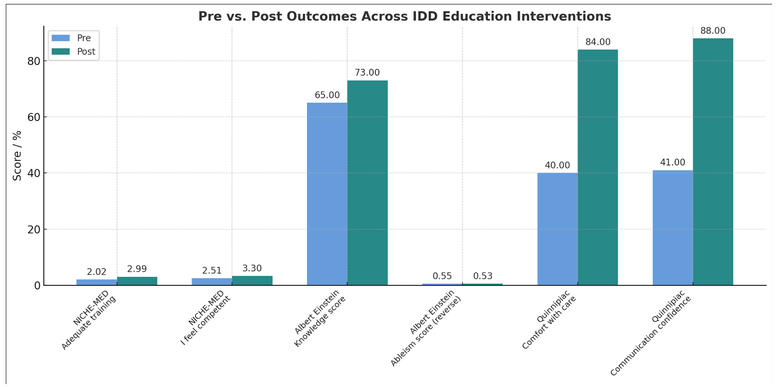
Systemic barriers and implicit bias within the healthcare system are barriers to effective and compassionate medical care for individuals with intellectual and developmental disabilities (IDD). **A significant contributing factor is the absence of formal IDD education in most medical school curricula.** Challenges such as limited curricular time, minimal relevance to board examinations, and insufficient clinical exposure leave medical students feeling unprepared and uncomfortable when caring for patients with IDD. Researchers have developed and implemented innovative, co-designed curricula to address these deficiencies and improve student competence and confidence. This review examined three co-designed curricular programs aimed at improving medical school preparation in caring for individuals with IDD, intending to evaluate their effectiveness and identify next steps for sustained improvement in care for the IDD population.

Methods

A literature-based review was conducted on three interventions:

- **NICHE-MED (N ≈ 40 schools, 2016–2024):** Each school developed its own community-engaged IDD curriculum.
- **Albert Einstein College of Medicine (N = 180):** Two mandatory IDD courses over two weeks.
- **Quinnipiac University (N = 208/107):** A two-part interprofessional Zoom seminar.

Outcomes were measured using validated pre/post knowledge and attitude instruments (e.g., ATTID, NICHE-MED surveys) and analyzed by student experience with IDD.



Results

- **NICHE-MED**
  - *Knowledge*: z = –7.947, p < .0001
  - *Attitude, "I have received adequate training":* ↑ from 2.02 → 2.99
  - *Attitude, "I feel competent"*: ↑ from 2.51 → 3.30
  - *Qualitative:* Students urged longitudinal integration & hands-on experiences.
- **Albert Einstein Plot**
  - *Knowledge*: ↑ from 65 → 73 (p < .001)
  - *Attitudes*: Ableism score ↓ from 0.55 → 0.53 (p < .001)
  - *Qualitative:* Students described prior training as "lacking" and praised course effectiveness.
- **Quinnipiac Seminar**
  - *Comfort*: ↑ from 40% → 84% (p < .001)
  - *Communication Confidence:* ↑ from 41% → 88% (p < .001)
  - *Qualitative:* Students cited a need for communication-specific training and more direct interaction with individuals with IDD.

Conclusions

Co-designed IDD curricula **significantly improved student knowledge, confidence, and attitudes**. High-impact strategies included patient panels, role-play, and adaptive communication training. Students across various programs advocated for making IDD education a required part of the curriculum, not just an elective, highlighting persistent gaps in communication, legal understanding, and clinical preparedness.

Implementation proved feasible across settings via partnerships with self-advocates, flexible delivery models, and faculty development. However, variation in interventions and reliance on self-reported short-term data limit generalizability. **Future work should focus on standardized, longitudinal IDD education integrated nationally.**

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