

Personal genetic testing for future genetic counselors: Assessing interest in offering personal genetic testing as an educational experience in genetic counseling graduate programs

Brian Corner, Kathleen Swenson, Allison Cirino

Boston University School of Medicine, Boston, Massachusetts

Medical training programs are seeking to adapt to the rapid integration of genetic testing into healthcare by offering personal genetic testing (PGT) to students as part of the course curriculum. Some medical schools have implemented this practice and there have been several studies on the experiences of medical students undergoing this training. However, PGT is not being readily incorporated into genetic counseling training program curriculum today. There is a clear gap in the literature pertaining to attitudes of genetic counseling students and faculty towards PGT in the graduate school classroom. A survey was administered to listserv members of the National Society of Genetic Counselors. Board certified or eligible genetic counselors were invited to participate. The survey assessed respondents' opinion towards the practice of offering PGT in genetic counseling training programs and asked respondents to comment on their own experiences with PGT in the classroom. A self-identified "leadership cohort" of faculty members of genetic counseling training programs was compared to the other respondents. In total, 258 eligible participants completed the survey, the majority of whom serve as clinical genetic counselors. Twelve-percent of respondents met criteria for the leadership cohort. Almost half (42%) of respondents were offered PGT during their training, Karyotyping was rated as the most appropriate level of PGT to offer in training programs followed by carrier screening, while WGS and WES were rated as the least appropriate. Respondents strongly agreed that genetic counseling training programs are well equipped to address the ethical, legal, and social implications surrounding the use of PGT as an educational experience. The fear of abnormal results and infringement upon students' autonomy were reported as the two most significant concerns. The majority of respondents felt that with the appropriate protocols in place, the practice could be implemented responsibly. The majority of students who were offered PGT reported a positive experience that increased their understanding of the patient perspective. The most frequent recommendations for implementing PGT responsibly were: must be optional, carrier screening (as an appropriate level of testing) and anonymous data as an alternative.