

# **Patients' Viewpoints Surrounding Preimplantation Genetic Diagnosis**

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Over the past two decades, there have been vast advancements in assisted reproductive technologies including preimplantation genetic diagnosis (PGD). As these developments take place, new ethical and social issues arise. Through the use of a survey, this study elucidated attitudes of 28 patients who had a consult for PGD. The majority of patients used PGD to avoid having a child with an aneuploidy, and many responded that they considered using PGD in order to have a biological child without a genetic condition. All patients thought that PGD was permissible in order to select against lethal and untreatable (non-lethal) childhood genetic disease. There was more variation in response to other applications including selection against late onset genetic diseases and cancer susceptibility syndromes, human leukocyte antigen (HLA) matching, selection for a genetic condition as well as medical and non-medical sex selection. Furthermore, 67% thought that PGD should be regulated based on acceptable uses, whereas 48% thought it should be regulated based on quality and safety. When asked who should regulate the technology based on acceptable uses, the majority (71%) thought that individual patients should make these decisions, while others would defer to professional organizations and individual medical professionals. With respect to termination, individuals who pursued PGD were less likely to consider termination if subsequent prenatal diagnosis revealed an affected pregnancy when compared to patients that did not pursue PGD. When considering alternative options to PGD, 43% thought that adoption would be an acceptable alternative, followed by egg donation (32%). Of note, 96% of patients responded that cost was the largest barrier to using PGD. The conclusions drawn from this study have led to a more lucid understanding of patients' perceptions of PGD which may enable future patients, policy makers, and medical professionals to make more informed decisions surrounding this rapidly expanding technology.