Anchoring and Uptake of Non-Invasive Prenatal Testing in the First and Second Trimester

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Non-invasive prenatal testing (NIPT) is a highly sensitive and specific screen for common aneuploidies which eliminates the risk of miscarriage diagnostic tests carry. It is unclear how this new prenatal option will impact pregnant women’s decision making process. Knowing what factors anchor women who have the option to elect NIPT screening will help genetic counselors and physicians facilitate more informed decision making. Women undergoing genetic counseling from November 2013 to February 2014 at a University of Texas Medical School Maternal Fetal Medicine Clinic who were 18 or more years old, English or Spanish speaking, and who would be offered NIPT during their counseling session were eligible to participate. An anonymous survey was administered prior to their genetic counseling session. Information about test uptake was completed by the genetic counselor post-counseling. Multivariate statistical analysis and backwards stepwise logistic regression were performed to determine what factors influence NIPT uptake, and thematic analysis was conducted. Logistical analysis of 17 factors from 149 surveys indicates anchoring factors that positively influence the uptake of NIPT are: desire to know if a pregnancy is affected (p=0.005), willingness to consider NIPT (p=0.011), some college education (p=0.009), and primary Spanish-speaking (p=0.013). Negative uptake was predicted by current abnormal screen (p=0.005). Overall uptake of NIPT was 73.82% (n=110). Separate analysis of 16 women who had NIPT prior to their genetic counseling appointment showed only 37.50% properly identified already having NIPT. A group of women was identified (17.50%) who declined all testing and screening options despite the option of NIPT. The presence of a group with an apparent lack of informed consent and a distinct group of women who decline all prenatal screening supports the need for genetic counseling to promote informed decision making when women are offered prenatal screening and testing options.

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