

Offering a choice between non-invasive prenatal testing (NIPT) and invasive testing in a public healthcare setting: do high-risk pregnant women make informed choices?

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Objective: Studying preferences and decision-making of pregnant women at high-risk for fetal aneuploidy who were offered a choice between NIPT, invasive testing or no follow-up testing.

Methods: The TRIDENT study is a Dutch nationwide prospective cohort study evaluating implementation of NIPT as a contingent screening test, offered to women at high-risk based on first-trimester screening (FTS) (risk \geq 1:200) or medical history. A questionnaire was completed after counselling at designated prenatal diagnostic centres. Measures included: health literacy, knowledge, test-preference, attitudes, decisional conflict and anxiety.

Results: Questionnaires were completed by 1,102/1,253 women (88% response rate), of which 86% had a high-risk FTS result and 14% a medical history. The majority (92%) preferred NIPT, 5% invasive testing, 0.8% no testing, and 2% was unsure. Main reason to prefer NIPT was safety for the child (92%). Women choosing invasive testing more often (87%) considered terminating a pregnancy for Down syndrome than women choosing NIPT (58%) (p0.001). The majority had sufficient knowledge and a positive attitude towards NIPT (90% and 91% respectively). Most women (78%) made an informed choice. Women with a high level of education (OR=1.63[1.09-2.45],p=0.017) and adequate health literacy (OR=2.82[1.51-5.28],p=0.001) were more likely to make an informed choice. Informed choice was associated with less decisional conflict (p0.001) and less anxiety (p0.001).

Conclusion: This implementation study succeeded in properly informing women, resulting in a high rate of informed choice. The majority of women prefers NIPT, mainly because it is safer. Extra attention should be given to women with lower educational level and/or inadequate health literacy.