The importance of cell-free fetal DNA (cffDNA) pre-test counseling: an overview and 3 years of implementation experience in teaching university hospital

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While cell-free fetal DNA (cffDNA) is being implemented rapidly, the implementation of a corresponding specialized counselling process in many respects lags behind. Studies from several countries are indicating that there are substantial educational gaps with regard to the limitations of cffDNA , also among maternal-fetal medicine (MFM) specialists , and these gaps are likely to be even more significant among non MFMs.

Although cffDNA has been proven as a powerful tool in screening for the common aneuploidies in general obstetrical population, its high cost limits its use and is mostly used as a part of integrated screening in women with high-risk for aneuploidy (contingent screening). As the number of conditions we are able to test for non-invasively expands, it will be increasingly important to ensure pre-test counselling can be delivered effectively supported by knowledgeable healthcare professionals. Here we provide 3-yrs experience of cffDNA screening in Helsinki (the largest tertiary teaching university hospital in Finland); both clinical use of the cffDNA in everyday practice and insight of patient´s choices, decision determinants and uptake variables in setting of public hospital with professional, personal and non-directed counselling.

It is inevitable to install effective safeguards for the shared decision making process in prenatal testing against individual and structural inadequacies related to the increasing use and significance of cffDNA in perinatal medicine.