



PREGNANCY LOSS RESEARCH GROUP

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Evaluation of the opinion of women on prenatal screening tests for fetal trisomy

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Background

- Currently there is no national screening programme for fetal anomaly in Ireland; this leads to a variation in practices between hospitals and healthcare practitioners.
- Universal access to anomaly screening ultrasound in all maternity centres was achieved in 2021.
- Non-invasive prenatal testing (NIPT) uses cell-free fetal DNA (cffDNA) to screen for aneuploidies, and is widely available.
- This study aimed to analyse women's opinions on availability, cost, and knowledge of prenatal screening tests for fetal anomaly.
- Information from this study should be used to inform health service policy-makers, managers and clinicians in creating a national screening programme.

Methods

- Anonymous, 33-item questionnaire on knowledge, preferences, and reasons for uptake of NIPT and knowledge of Down Syndrome (DS) was distributed.
- Participants: All women over 18 who attended the public and private antenatal clinics in a tertiary maternity hospital in Cork, Ireland between 07 September and 02 October 2020.
- Analysis: Descriptive statistics and Chi-square analysis in SPSS v26

Results

Participants (n=332)

- Age:** median 34 years (max 46, min 18)
- 76% Irish** (n=251); 16% Other White/Traveller (n=52); 9% Other (n=28)
- 60% 1-2 Children;** 31% Primigravida; 9% ≥3 Children
- 60% had third level education**
- 85% in Public care;** 15% in Private care

Participants' knowledge on NIPT

- 26% (n=83) had heard of NIPT**
- 18.5% (n=59) could name a screening test.**
- 41% only correctly identified one type of screening test** (Table 2).
- Only 7.5% correctly identified all different types of screening.
- 62% (200/321) understood the scope and limitations of screening tests
- 77% (n=251) correctly interpreted low-risk and 76% (n=245) correctly interpreted high-risk test results.
- 61% (n=201) knew that screening tests were unable to detect all babies with Down Syndrome (DS).

Results

Table 1: Desired Screening Programme Characteristics

n (%)		n (%)	
All women should be offered test		Amount willing to pay for screening test	
Agree	303 (91.5)	€50	9 (3.0)
Disagree	11 (3.3)	€100 or €150	38 (12.5)
Unsure	17 (5.1)	€200 or €250	47 (15.5)
Only women >35 years old should be offered test		€500	20 (6.6)
Agree	68 (21.0)	Any amount	48 (15.8)
Disagree	229 (72.9)	Nothing, it should be free	141 (46.5)
Unsure	19 (6.1)	Who should be responsible for the screening costs	
		HSE	263 (88.0)
		Hospital	13 (4.3)
		Woman being tested	23 (7.7)
		Preference on where information about screenings tests should be provided	
		First hospital clinic visit	171 (66.8)
		From patient's GP	73 (28.5)
		Hospital Website	12 (4.7)

Desired Screening Programme

- Majority wanted a **programme that offered tests to all women, free of charge** (or costs covered by the Health Service).
- Women also wanted to be **informed about the available testing options during their first hospital clinic visit.**

Table 2: Women's understanding of what "screening for anomalies" is

	Correct n (%)	Incorrect n (%)
Anatomy scan	257 (77.9)	73 (22.1)
Blood tests to look at levels in the mother's blood	46 (13.9)	284 (86.1)
Measuring fluid on back of baby's neck	107 (32.4)	223 (67.6)
Ultrasound scan to look for signs of DS	143 (43.3)	187 (56.7)
Blood tests to look at the baby's DNA for risk of Down Syndrome	139 (42.1)	191 (57.9)

Conclusion

Although women had poor overall knowledge on NIPT, they had good understanding of screening test interpretation. Accurate and clear information on NIPT should be given to all women. A national screening programme for all pregnant women including educational material on fetal anomalies and aneuploidies should be established.

Results

Figure 1: Reasons why women would accept prenatal screening tests

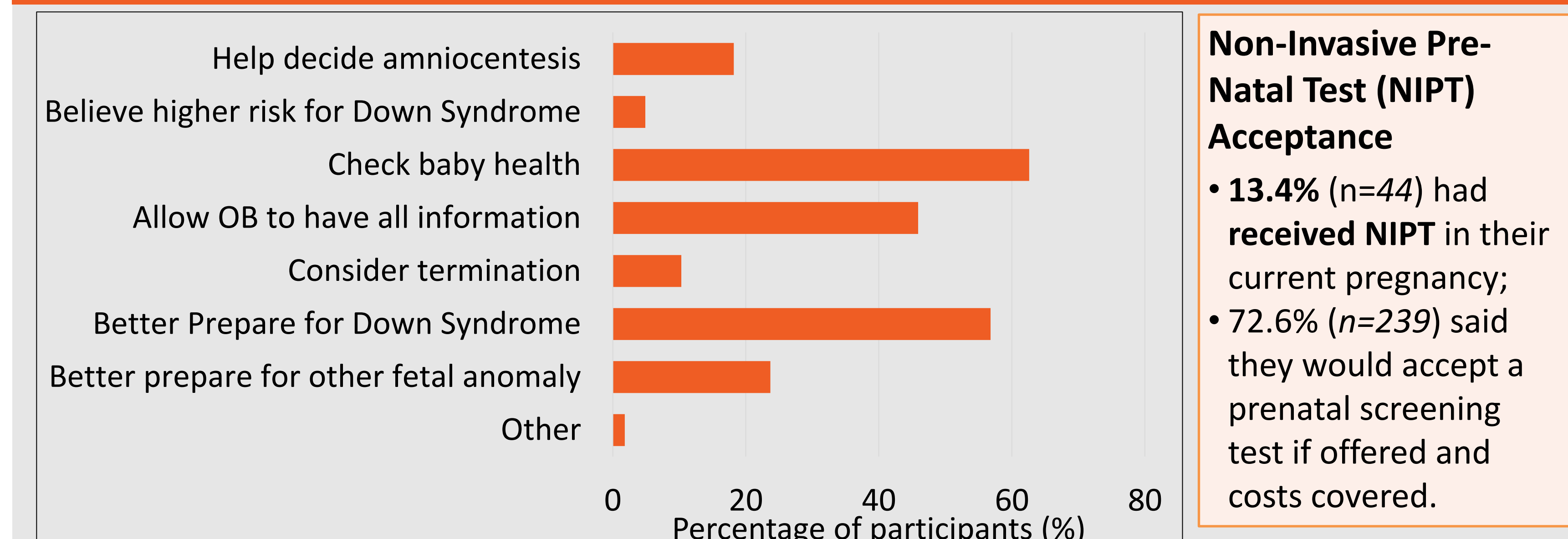
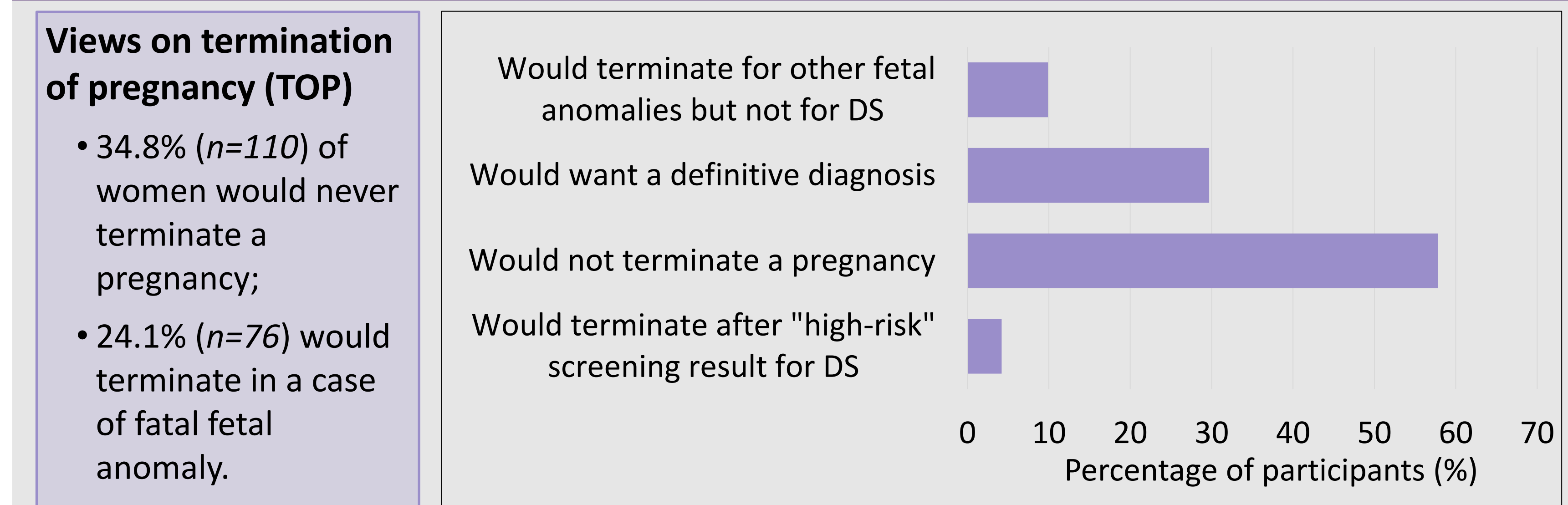


Figure 2: Women's views on TOP following a prenatal screening result of 'high-risk' for Down Syndrome (DS), but before definitive diagnosis



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