

Barriers and potential solutions to improve access and equity in prenatal screening for



all pregnant women

Dr. Orit Abdalla¹, Dr. Cindy Woods², Professor Caroline de Costa³

1. Cairns Hospital 2. University of New England 3. James Cook University

Contact: orit.abdalla@my.jcu.edu.au

Abstract

Recent studies show that prenatal screening tests are not being offered universally in all regions of Australia.¹⁻⁵ This study aimed to asses why discrepancies exist and identify barriers and potential solutions to improve access and equity in screening for all pregnant women.

Method

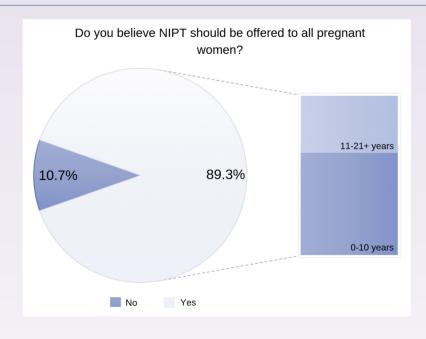
Twenty practices in regional Australia employing general practitioners or private obstetricians were contacted in this cross-sectional study. The practitioners received a 12-question survey via email or hard copy, asking about current practice and knowledge of prenatal screening. The survey was analysed using descriptive and inferential statistical tests; responses were compared based on their current role (GP/obstetrician) and length of experience.

Results

A total of 28 practitioners completed the survey. 100% of practitioners stated the main reason women chose not to have prenatal screening was the time involved, followed by costs (79% of total). There were no significant differences between GPs' and obstetricians' responses, nor between length of practice except in regard to non-invasive prenatal testing (NIPT) being offered to all pregnant women – a greater proportion of participants with 10 years or less of practice supported the practice compared with those with > 10 years.

Conclusion

This study demonstrated numerous barriers limiting pregnant women accessing prenatal screening tests in regional Australia, with all practitioners agreeing that time and costs are the most important of these barriers. Introducing Medicare-funded prenatal screening tests such as NIPT is a potential solution to improve equity of access for all pregnant women in Australia.



Profession Length of Practice 0-5 years 6-10 years 11-15 years 16-20 years 21+ years	N (%)	N (%)	Obstatuisis
Length of Practice 0-5 years 6-10 years 11-15 years 16-20 years 21+ years	28		Obstetriciai N (%)
0-5 years 6-10 years 11-15 years 16-20 years 21+ years		25 (89.3)	3 (10.7)
6-10 years 11-15 years 16-20 years 21+ years			
11-15 years 16-20 years 21+ years	9 (32.1)	8 (32.0)	1 (33.3)
16-20 years 21+ years	7 (25.0)	7 (28.0)	0
21+ years	5 (17.9)	4 (16.0)	1 (33.3)
•	2 (7.1)	2 (8.0)	0
	5 (17.9)	4 (16.0)	1 (33.3)
Feel well informed about CFTS			
Yes	25 (89.3)	22 (88.0)	3 (100.0)
No	3 (10.7)	3 (12.0)	0
Feel well informed about NIPT			
Yes	23 (82.1)	20 (80.0)	3 (100.0)
No	5 (17.9)	5 (20.0)	0
Feel well informed about invasive tests which may follow a high-risk CFTS/NIPT result			
Yes	22 (78.6)	19 (76.0)	3 (100.0)
No	6 (21.4)	6 (24.0)	0
Do you offer prenatal screening to			
all pregnant women			
Yes	27 (96.4)	24 (96.0)	3 (100.0)
No	1 (3.6)	1 (4.0)	0
Which prenatal screening tests do		,	
you offer			
CFTS	2 (7.1)	2 (8.0)	0
Second trimester triple screening	0	0	0
NIPT	1 (3.6)	1 (4.0)	0
CFTS and NIPT	25 (89.3)	22 (88.0)	3 (100.0)
None	0	0	0
Who do you believe prenatal	·		
screening should be offered to			
Younger women			
Yes	4 (14.3)	4 (16.0)	0
No	24 (84.7)	21 (84.0)	3 (100.0)
Women of increased maternal age			
Yes	9 (32.1)	9 (36.0)	0
No	19 (67.9)	16 (64.0)	3 (100.0)
Women with a family history of fetal anomalies			
Yes	9 (32.1)	9 (36.0)	0
No	19 (67.9)	16 (64.0)	3 (100.0)
Multiparous women	` ,	, ,	, ,
Yes	5 (17.9)	5 (20.0)	0
No	23 (82.1)	20 (80.0)	3 (100.0)
Indigenous women	, ,		, ,
Yes	5 (21.4)	6 (24.0)	0
No	22 (78.6)	19 (76.0)	3 (100.0)
All pregnant women	(. 5.5)	(. 3.3)	- (-00.0)
Yes	24 (85.7)	21 (84.0)	3 (100.0)
No	4 (14.3)	4 (16.0)	0
Do you offer prenatal screening to	(25)	(20.0)	
women past 13 weeks gestation			
Yes	21 (75.0)	18 (72.0)	3 (100)
No	7 (25.0)	7 (28.0)	0
Do you believe NIPT should be	, (25.0)	, (20.0)	
you welleve this i should be			
offered to all pregnant women	25 (89.3)	23 (92.0)	2 (66.7)
	3 (10.7)	2 (8.0)	1 (33.3)
offered to all pregnant women Yes	- (-0.7)	_ (0.0)	_ (33.3)
offered to all pregnant women Yes No			
offered to all pregnant women Yes			
offered to all pregnant women Yes No What do you think are the main			
offered to all pregnant women Yes No What do you think are the main reasons women choose not to have prenatal screening Termination of pregnancy is not	19 (67.9)	16 (64.0)	3 (100.0)
offered to all pregnant women Yes No What do you think are the main reasons women choose not to have prenatal screening Termination of pregnancy is not an option Invasive tests increase risk of	19 (67.9) 6 (21.4)	16 (64.0) 6 (24.0)	3 (100.0)
Yes No What do you think are the main reasons women choose not to have prenatal screening Termination of pregnancy is not an option Invasive tests increase risk of miscarriage Prepared to care for a child with			, ,
offered to all pregnant women Yes No What do you think are the main reasons women choose not to have prenatal screening Termination of pregnancy is not an option Invasive tests increase risk of miscarriage Prepared to care for a child with down syndrome	6 (21.4)	6 (24.0) 12 (48.0)	0 1 (33.3)
Yes No What do you think are the main reasons women choose not to have prenatal screening Termination of pregnancy is not an option Invasive tests increase risk of miscarriage Prepared to care for a child with down syndrome Women believe they are low-risk	6 (21.4) 13 (46.4) 12 (44.4)	6 (24.0) 12 (48.0) 12 (50.0)	0 1 (33.3) 0
Yes No What do you think are the main reasons women choose not to have prenatal screening Termination of pregnancy is not an option Invasive tests increase risk of miscarriage Prepared to care for a child with down syndrome Women believe they are low-risk Costs associated with prenatal screening	6 (21.4) 13 (46.4) 12 (44.4) 22 (78.6)	6 (24.0) 12 (48.0) 12 (50.0) 21 (84.0)	0 1 (33.3) 0 1 (33.3)
Yes No What do you think are the main reasons women choose not to have prenatal screening Termination of pregnancy is not an option Invasive tests increase risk of miscarriage Prepared to care for a child with down syndrome Women believe they are low-risk Costs associated with prenatal	6 (21.4) 13 (46.4) 12 (44.4)	6 (24.0) 12 (48.0) 12 (50.0)	0 1 (33.3) 0

References

1. Abdalla O, Woods C, de Costa C. A clinical audit of combined first trimester screening and non-invasive prenatal testing offered to pregnant women in a regional Australian hospital. Aust NZ J Obstet Gynaecol 2019; 59(1):157-160.

Other

- 2. Moses R, Brown J, Wright D et al. Who is and isn't having Down syndrome babies in western Sydney: a 10-year tertiary hospital cohort study. Aust NZ J Obstet Gynaecol 2017; 57(2): 146-51.
- 3. O'Leary P. Breheny N, Reid G et al. Regional variations in prenatal screening across Australia: Stepping towards a national policy framework. *Aust NZ J Obstet Gynaecol* 2006; 46(5):427-32.

 4. Coory M, Roselli T, Carroll H. Antenatal care implications of population-based trends in Down syndrome birth rates by rurality and antenatal care provider, Queensland, 1990-2004. *Med J Aust* 2007; 186(5): 230-34.
- 5. Maxwell S, Brameld K, Bower C et al. Socio-demographic disparities in the uptake of prenatal screening and diagnosis in Western Australia. *Aust NZ J Obstet Gynaecol* 2011;51(1): 9-16.