



# Who quits smoking during pregnancy? What can we learn from these women?

## Mai Frandsen, Megan Thow, and Stuart G Ferguson

Faculty of Health, University of Tasmania, Australia

#### Rationale

- Many studies (e.g., 1,2) focus on identifying who smokes (compared to those who do not) during pregnancy, with higher rates found among women who are:
  - Younger
  - Low SES background
  - Indigenous
  - Living in a rural or remote area
- Consequently, cessation interventions traditionally target socially disadvantaged women.
- ❖ However, this strategy is not enough since only ~7% of women quit while pregnant – despite the support provided (~8 antenatal visits).³
- More important to know, out of women who smoke, what makes them more likely to successfully quit, so that these factors can be supported and promoted.

Who quits during pregnancy?
How are they different from those who do not?

#### Methods

Data were drawn from the Tasmanian Population
Health database of women who had received
antenatal care in Tasmania (Australia) between 2011
and 2013 (n = 14300).

- ❖ 2781 (19.4%) self-reported as smoking in the first half (first 20 weeks) of their pregnancy.
- ❖ Of these, 2570 (92.4%) continued to smoke and 211 (7.6%) quit during the second half of their pregnancy (second 20 weeks).
- Demographic and smoking characteristics were compared between smokers and non-smokers (Table 1), and quitters and non-quitters (Table 2).

Variable	Mean (SE)/Frequency			p value
	Total	Non smokers	Smokers	Independent Samples t-test or Chi-Square
	sample <sup>1</sup>	n = 9908	n = 2781	
	N = 14300	(69.3%)	(19.4%)	
Age	28.16 (.05)	28.79 (.06)	26.02 (.11)	p <.001
Gestation at first visit <sup>2</sup>	6.21 (.05)	6.10 (.06)	6.36 (.13)	p = .08
Average number of antenatal	5.74 (.04)	5.67 (.05)	5.46 (.09)	p <.05
visits				
In a Relationship <sup>3</sup>	72.1%	78.8%	50.2%	p <.001
Born in Australia <sup>4</sup>	90.3%	88.0%	98.1%	p <.001
Indigenous <sup>5</sup>	5.9%	4.1%	11.5%	p <.001
Alcohol consumed <sup>6</sup>	9.2%	8%	13.5%	p <.001
Mental health condition <sup>7</sup>				
No Mental Health Issues <sup>7</sup>	70.5%	75%	55%	p <.001
Depression	11.8%	9.9%	18.5%	p <.001
Anxiety	3.3%	3.1%	4.2%	p <.01
Postnatal Depression	4.2%	3.6%	5.7%	p <.001
Anxiety & Depression	3.2%	2.6%	5.3%	p <.001
Other Combination	4.1%	3.2%	7.1%	p <.001
Drug Usage				
No drug use	97.0%	98.9%	90.1%	p <.001
Marijuana <sup>8</sup>	2.8%	0.9%13	9.1%	p <.001
Amphetamines <sup>9</sup>	0.2%	0.1%14	0.7%	p <.001
Poly Drug Use <sup>9</sup>	0.2%	0.2%15	0.4%	p =.19

#### Results

Women who quit were more likely to (Table 2);

Be in a relationship

Not have experienced Postnatal Depression

	Mean (SE) or Freque	p value	
Variable	Non Quitters	Quitters	Independent
	N = 2570	N = 211	Samples
			t-test or Chi-Squa
Age	26.08 (.12)	25.27 (.40)	p = .06
Gestation at first visit <sup>1</sup>	6.41 (.14)	5.75 (.42)	p = .14
Average no. of antenatal visits	5.41 (.10)	6.06 (.36)	p = .08
In a relationship <sup>2</sup>	49.6%³	57.8%	p < .05
Born in Australia	98.1%	97.2%	p = .33
Indigenous <sup>3</sup>	11.8%	8.6%	p = .16
Consumed Alcohol <sup>4</sup>	13.8%	10.4%	p = .17
Mental health condition <sup>5</sup>			
No Mental Illness	55.0%	55.5%	p = .89
Depression	18.5%	18.5%	p = .99
Anxiety	4.2%	4.7%	p = .69
Postnatal Depression	6.0%	2.4%	p < .05
Anxiety & Depression	5.3%	6.2 %	p = .57
Other Combination	7.2%	5.7%	p = .42
Drug use			
No drug use	90.0%	91.9%	p = .36
Marijuana <sup>6</sup>	9.1%	8.1%	ρ = .60
Amphetamines <sup>6</sup>	0.7%	0.5%	ρ = .70
Poly Drug Use <sup>7</sup>	0.4%	0.5%	p = .77

### Implications

- Need to focus resources on *characteristics that* influence ability to quit, not just likelihood of smoking.
- Consistent with other literature, this research indicates that partner support<sup>4,5</sup> and mental health<sup>6,7</sup> are key.
- Consequently, effective smoking cessation in pregnancy interventions should focus on promoting:
- Partner support
  - ✓ Encourage and support partner to quit smoking.
  - ✓ Encourage *positive* (rather than negative 'nagging') support behaviours.
  - ✓ Include partners in antenatal care conversations, including effect of SHS exposure.
  - ✓ Support identification of alternative support partner (where traditional partner is absent).
- Mental health
- ✓ Smoking cessation cannot be targeted in isolation, holistic support needed to also address mental and physical health.
- ✓ Important to provide both ante- and post-natal mental health support.
- ✓ Encourage linking of existing services (e.g., hospital social support services, pharmacy, drug and alcohol services, child health services) to promote perinatal mental health.

A pregnant smoker's social environment and mental health must be acknowledged and incorporated in order to facilitate quit support that is effective and long-lasting.

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Contact

Dr Mai Frandsen

Postdoctoral Research Fellow

Cancer Council Tasmania | Faculty of Health

University of Tasmania

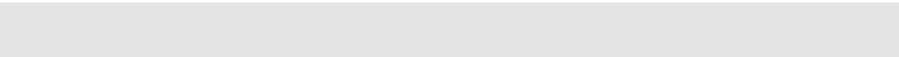
Launceston TAS Australia 7250

E: Mai.Frandsen@utas.edu.au

M: +61428 364 819

**@FrandsenMai** 





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