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# Antidepressant use in pregnancy: A survey of Victorian General Practitioner's practices and perspectives

# Team

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# Background

MJA The Medical Journal of Australia

# Maternal mortality trends in Australia

## Maternal death is low and decreasing in Australia, but continuing surveillance is important

The death of a mother or a baby has significant short and long term impacts for the surviving family members and for the community and health workers who cared for them. The World Health Organization estimates that 303 000 women died in pregnancy and childbirth in 2015, with 99% of these deaths occurring in low income countries.[1]

In Australia, a series of reports regarding maternal deaths has been published over the past five decades; the first in the series covered the 1964–1966 triennium.[2] These reports examine the deaths that occurred during pregnancy or within 42 days of the end of pregnancy. They are compilations of data sourced from multidisciplinary state maternal mortality review


- **Infection, abortion and pre-eclampsia have been overtaken by maternal CVD and psychosocial health problems as the leading cause of maternal death in Australia**

- **Psychosocial death is the only group where the MMR is rising**;

# Background

- Perinatal depression is a significant contributor to psychosocial maternal mortality and affects up to 20% of women in Australia, [19] with an estimated cost of up to half a billion dollars annually.[20]
- The majority of women suffering from perinatal depression will seek help primarily from their general practitioner (GP)

# Background

- Previous studies have shown that there exist significant discrepancies in views on management as well as a general lack of subject knowledge and confidence in management amongst GPs.[17]
- A 2016 systematic review concludes that further research to understand the attitudes, motivators and barriers to recognition and treatment of perinatal depression in general practice is crucial.[25]

# Risk vs Benefit Assessment

## Risks of Untreated Major Depressive disorder

- Low birth weight
- Premature birth
- Low maternal weight gain
- Increased rates of cigarette, alcohol and other substance abuse
- Overall worse health status
- Significant morbidity and mortality on the whole family
- Postpartum depression
- Risk of suicide

## Risks of treatment

- Appear to be small
- However majority of studies low – moderate quality – No RCTs
- Preterm birth
- PPH

The substantial **inconsistency** in the **type** and **magnitude** of **adverse events** reported, may **suggest** the **associations** are **less likely** to **represent** a **true effect**[31]

# Summary of Evidence:

The **risks of untreated moderate to severe maternal major depression**, **to both the mother and fetus**, **often outweigh the risks associated with antidepressants**[32] – **UpToDate**

So we wanted to know what GPs are doing

# Methodology

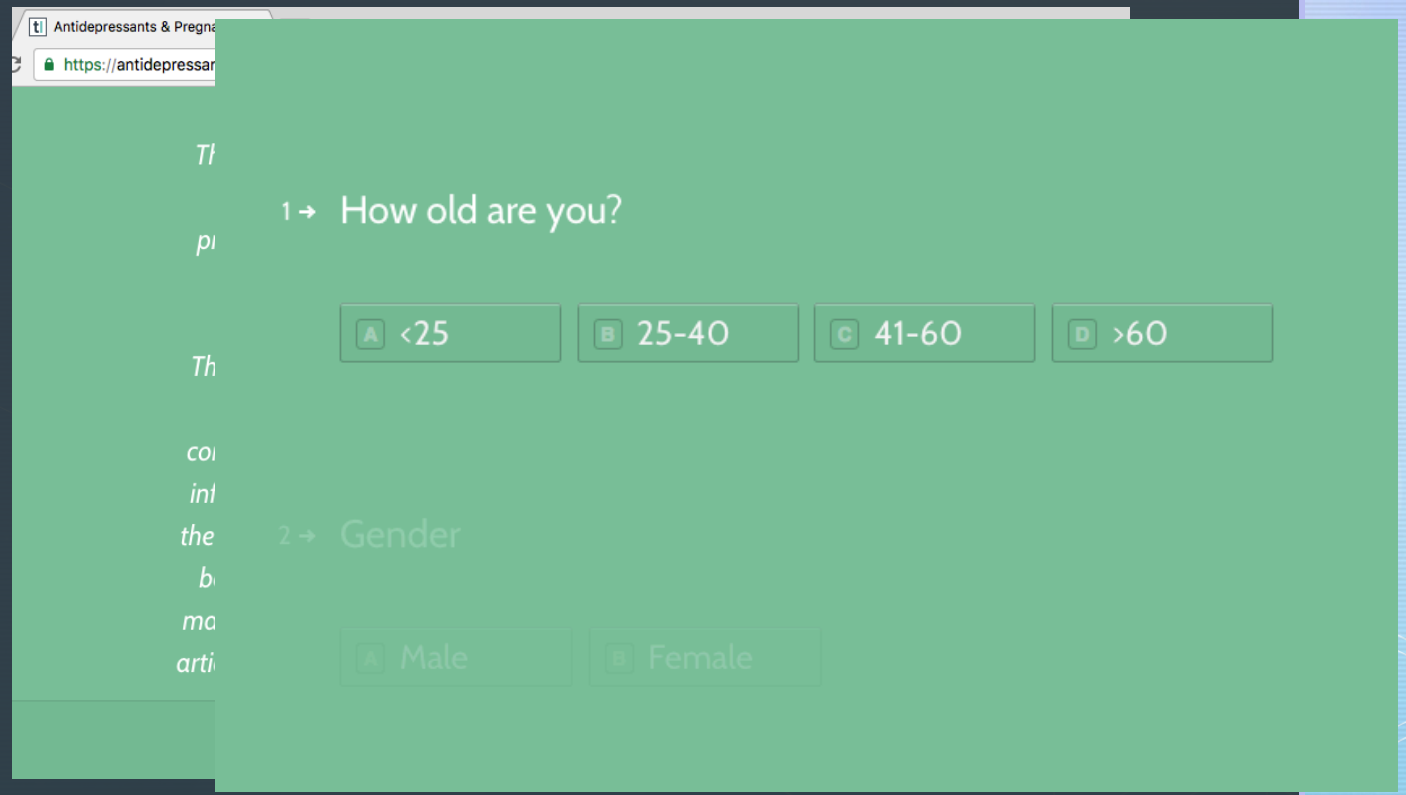
# Methods

- Survey
  - Designed with input from a specialist obstetrician, pharmacist, statistician and a perinatal mental health psychiatrist and trialled by three local GPs
  - Demographics, Questions & Case vignettes

https://antidepressantsandpregnancy.typeform.com/to/Q7iHbf/fallback

# Survey Design

1. Demographics
2. Case Vignettes
3. Perspectives



# Case Example

**Sarah is 24 years old. She has been feeling unusually sad the last 6 months. She is tired all the time and yet fails to get a good night of sleep. She has lost her appetite, no longer enjoys time with her friends and struggles to concentrate at work. She previously experienced suicidal ideations but no longer does currently. With further history and examination you diagnose a moderate major depressive disorder.**

**Would you:**

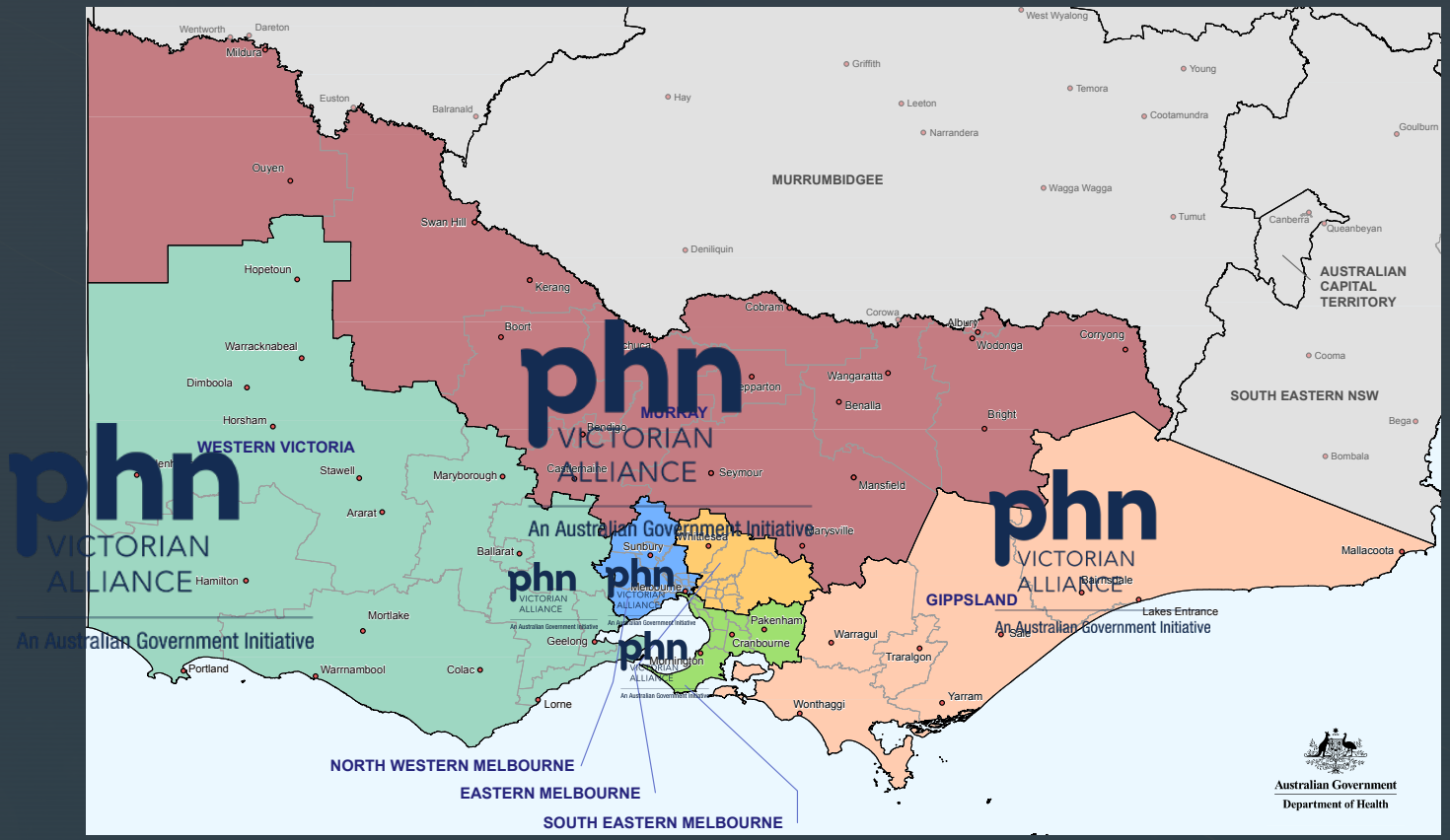
a) Commence antidepressant therapy

b) Commence psychotherapy

c) Commence Both

d) Other

# 2. Distribution (Methodology)



# Analysis

- SPSS
- Chi Square & Fisher’s exact
- Theme analysis

# Results & Discussion

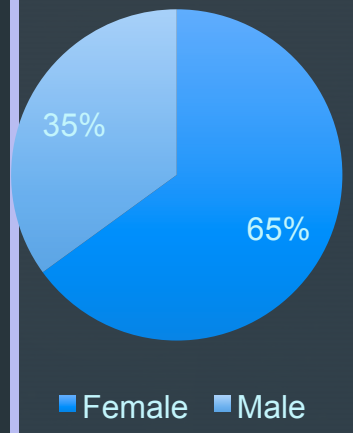
# Limitations

- Small sample size
- Self sampling bias
- Generalisability

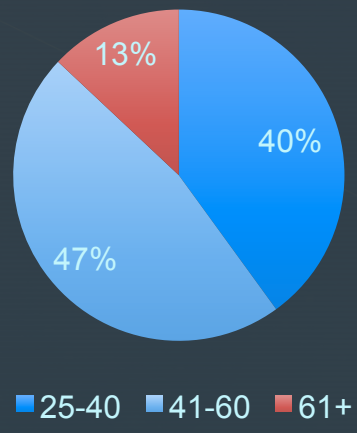
# Results

- 62 Victorian GPs responded (52% completion rate)
- Largest survey of its kind in Australia the last 10 years

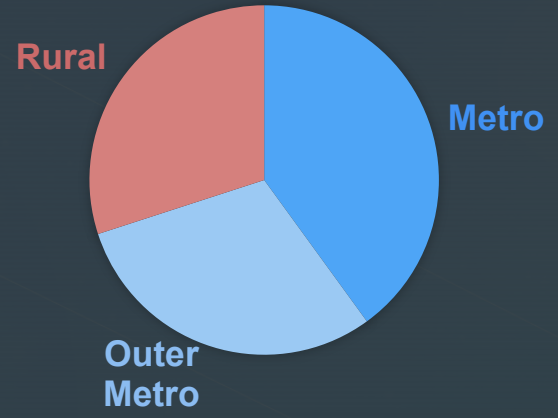
## Gender



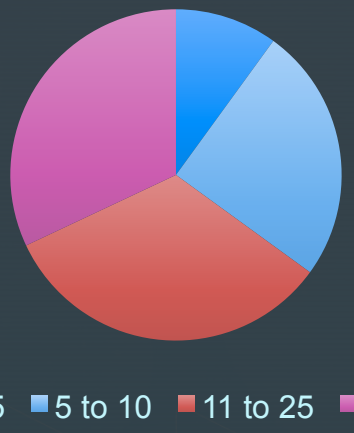

## Age




## Location




## Years Experience



# Case Vignettes – Antidepressant prescription

- **Percentage of antidepressant prescription by case**
- There is a 25% decrease in the number of GPs deciding to prescribe AD in Case 1.
- ($\chi^2$ df – 1 n=62) = value 15.092, $p$ = <0.001
- There is a 25% decrease in the number of GPs deciding to prescribe AD in Case 2
- ($\chi^2$ df – 1 n=62) = value 3.261, $p$ = 0.071)
- *No significant differences in Rural vs Metro/Outer Metro*

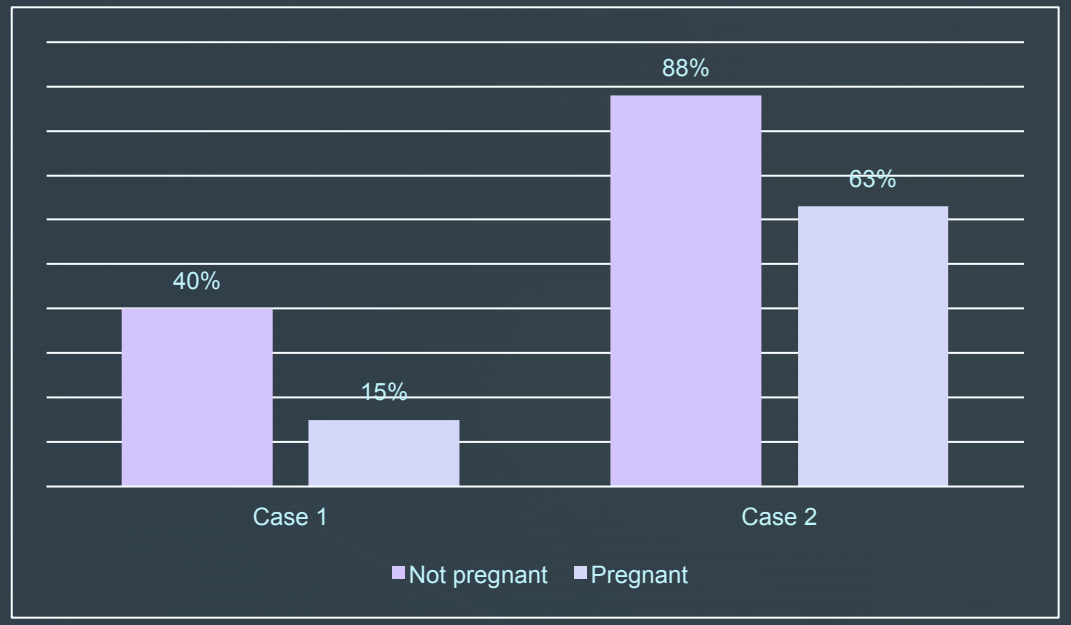



*Figure 1: Comparison of GP AD prescription rate to non-pregnant vs Pregnant patients in Case 1 and 2*

# Case Vignettes - Psychotherapy Referral

**Percentage of psychotherapy referral by case**

- There is an 8% increase in the number of GPs deciding to prescribe psychotherapy after the diagnosis of pregnancy in Case 1

($\chi^2$ df–1 n=60) = value 2.791, $p$ = 0.095.

- There is a 9% increase in the number of GPs deciding to prescribe psychotherapy after the diagnosis of pregnancy in Case 2

($\chi^2$ df–1 n=60) = value 22.857, $p$ = <0.001

*No significant differences in Rural vs Metro/Outer Metro*

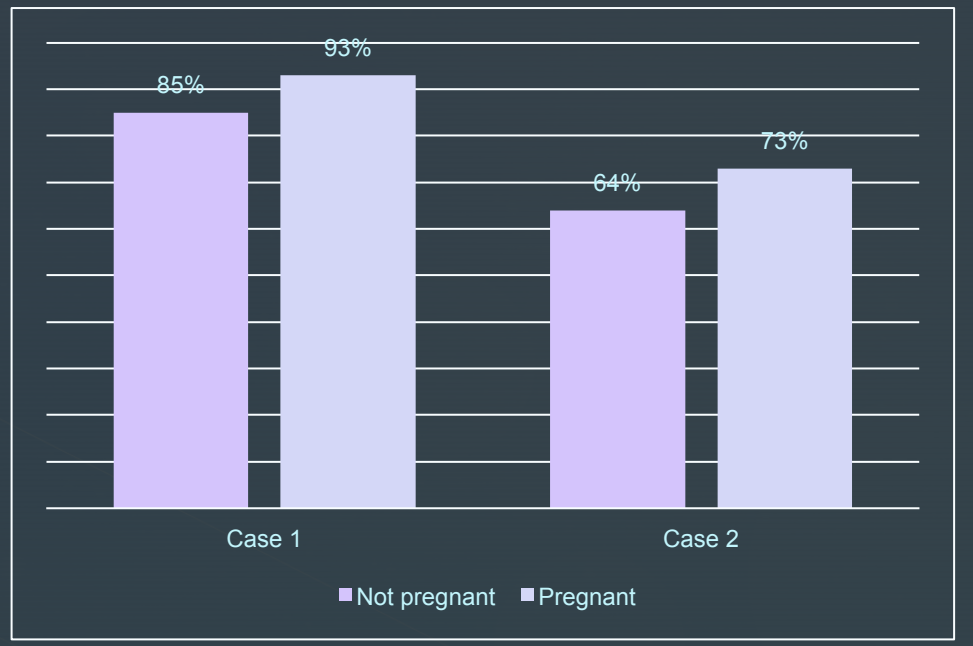



*Figure 2: Comparison of GP psychotherapy prescription rate to non-pregnant vs Pregnant patients in Case 1 and 2*

# Perspectives

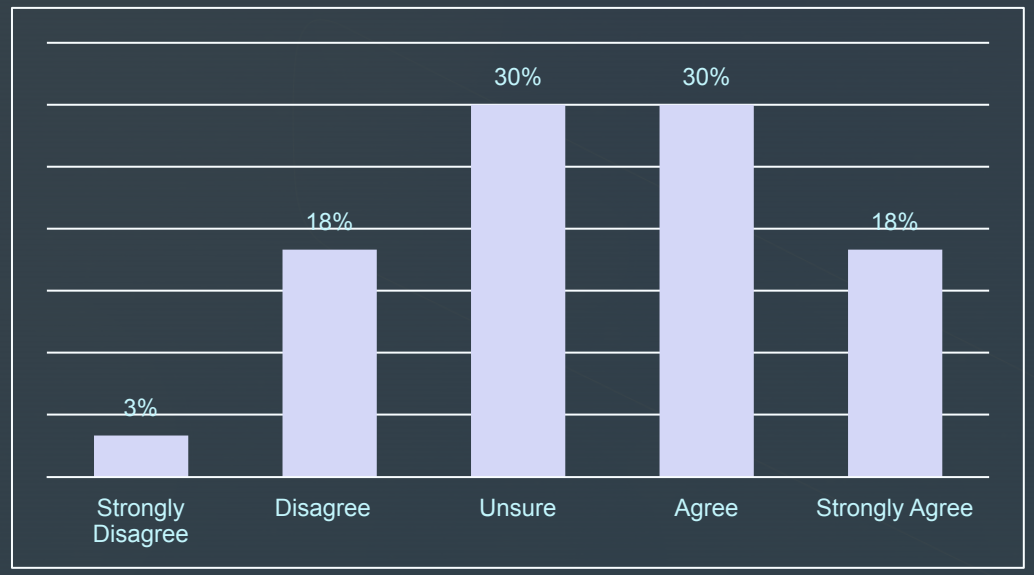



*Figure 3: GP's opinion on safety of AD use in pregnancy*

- Pregnancy independent determinant of antidepressant cessation[15]
  - Confirms GP concern as a cause

- Teratogenicity, foetal withdrawal
- GP's commonly overestimated the teratogenicity of safe drug

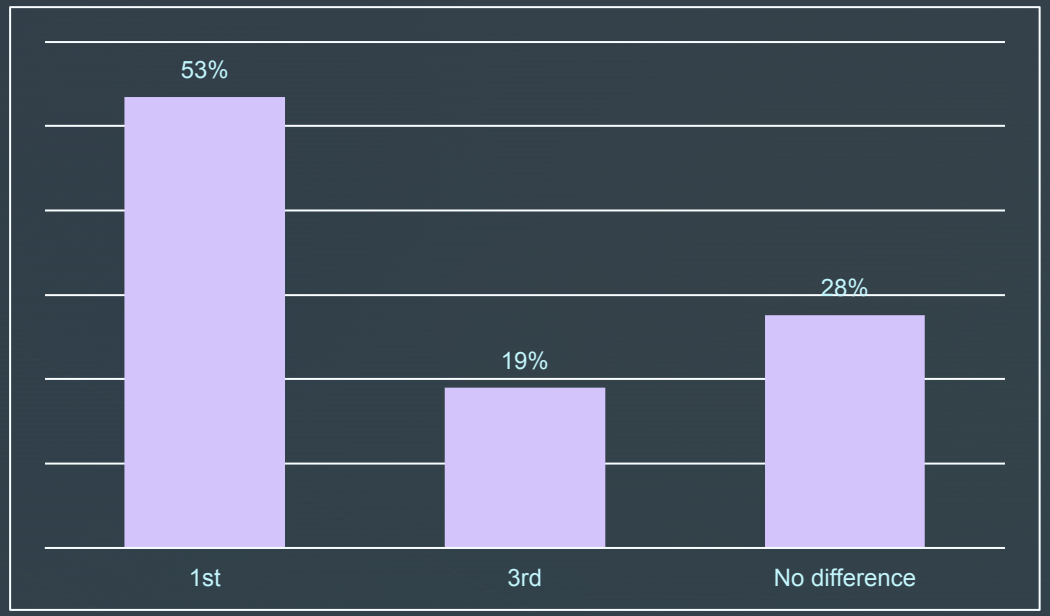
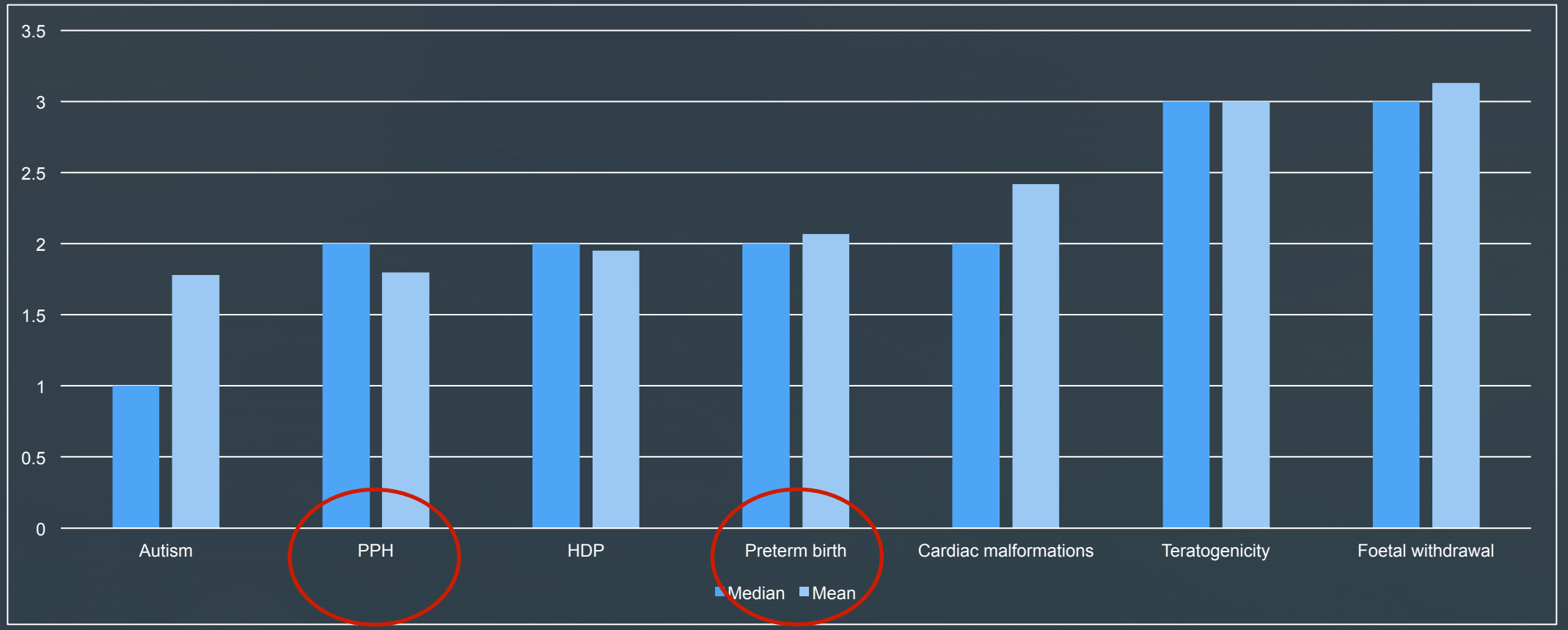



*Figure 6: Trimester that GP's are most concerned about when prescribing AD in pregnancy*

# Concerns of antidepressants in Pregnancy



# Results

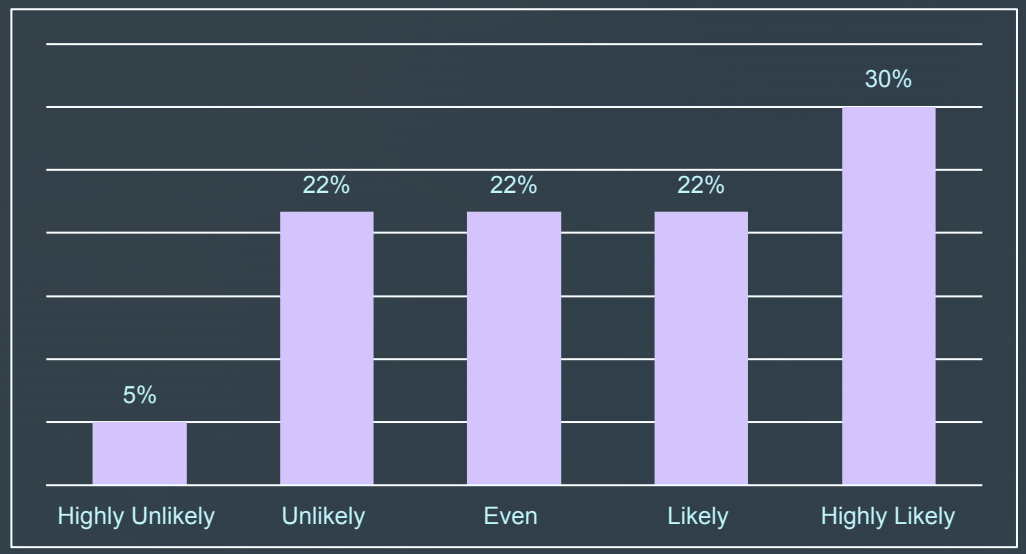



*Figure 4: GP's likelihood to refer pregnant patients requiring AD*

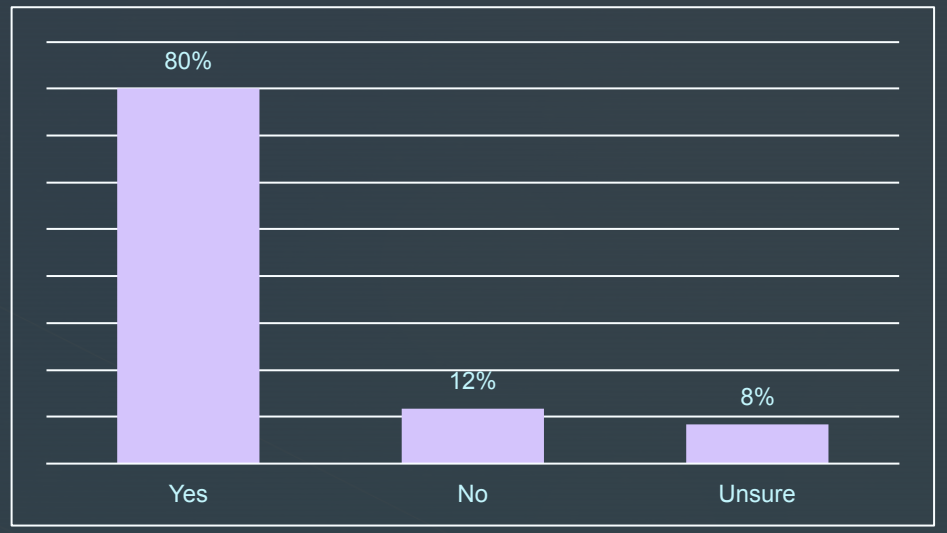
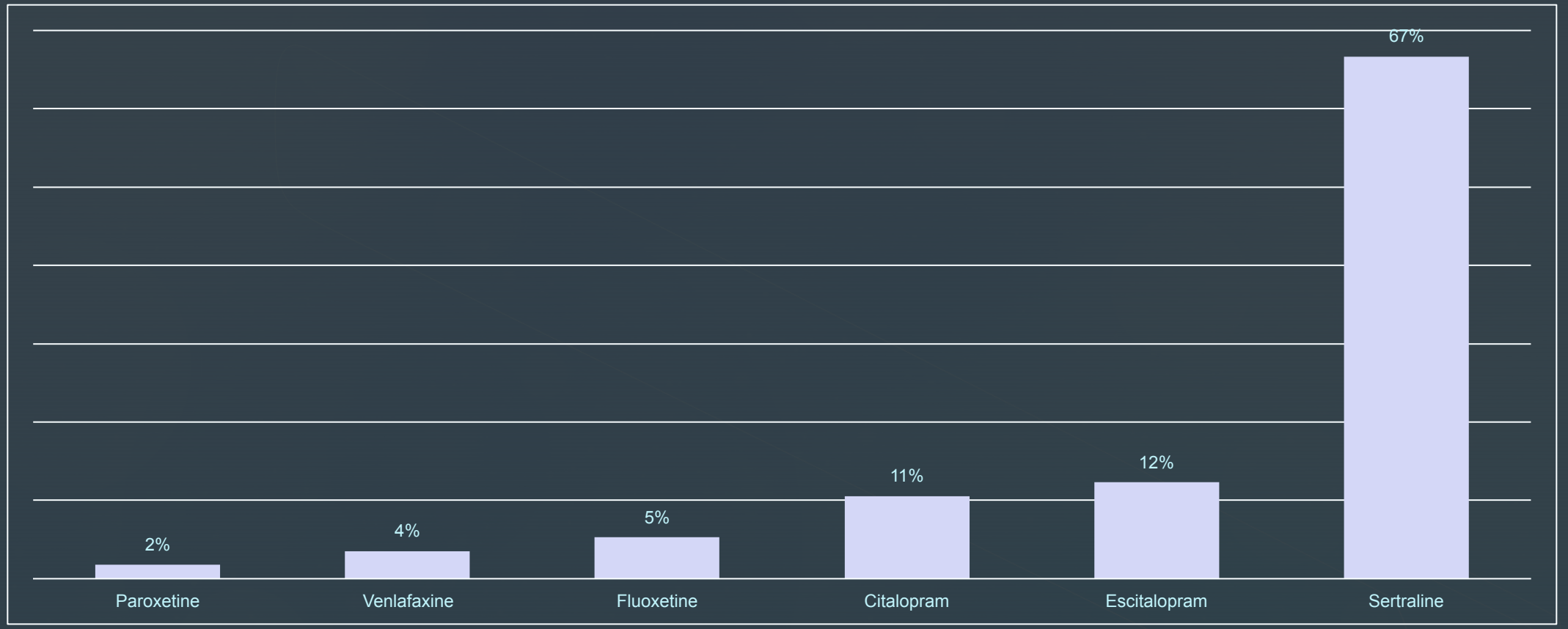



*Figure 5: GP's opinion on the need to develop guidelines*

# Antidepressant of choice in Pregnancy



# Theme Analysis

| What are your concerns regarding antidepressant use in pregnancy? n=34 | |
|---|---|
| **Themes** | **No.** |
| Antidepressant effects on foetus | 19 |
| Lack of evidence/guidelines | 9 |
| Misinformation of public | 4 |
| Effects of depression on foetus | 3 |
| Stability of mother's mental health | 3 |
| Long term effects on child | 2 |
| Breastfeeding effects on infant | 2 |
| Medication adherence | 2 |
| No concerns | 2 |
| Medico-legal issues | 2 |
| Anti-depressant effect on mother | 1 |

| What would be most beneficial for you as a GP to assist with the prescription of antidepressants in pregnancy? n=44 | |
|---|---|
| Themes | **No.** |
| Development of guidelines | 38 |
| Information resources for patients | 4 |
| Pharmacist advice | 1 |
| Psychiatrist advice | 1 |
| Antenatal mental health support services | 1 |

# Conclusions

- The findings have shown that GPs are conservative with the use of antidepressants in pregnancy
  - Antidepressant cessation in pregnancy is not only due to patient controlled barriers but also due to concerns held by the GP
- Likely to refer
- Up to date Australian guidelines needed

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