

# Travel patterns and advice seeking behaviour of pregnant women: a multi-center cross-sectional study



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### Introduction

- Pregnant women are at increased risk of morbidity from venous thromboembolism and travel-related infectious disease<sup>1-2</sup>
- To date, no data exists describing the travel patterns of pregnant women in Australia or the quality of pre-travel counselling they receive

### Aims

To examine travel patterns of pregnant women in Melbourne Australia, the frequency of pre-travel consultation and advice recalled by women

# Methodology

- **Population**: Women admitted between 21 May 2019 to 22 April 2020 who delivered a liveborn baby during that admission
- **Methodology:** Cross-sectional study across five Victorian maternity hospitals
  - Three public hospitals (total ~9000 births/year)
  - Two private hospitals (total ~4000 births/year)
- Descriptive analysis was performed on the responses to a 32-question survey
- International travel destinations were reviewed by an infectious diseases physician, and travel advice reported was correlated with Centers for Disease Control (CDC) recommendations for that destination

#### Results

- · 410 total participants were included
- 44% (182/410) travelled in pregnancy
  - 33% (135/410) travelled interstate
  - 20% (80/410) travelled internationally
- The most common reason for not seeking pre-travel advice was the belief that travel posed no risk (60.3%, 35/58)





#### Figure 1: Comparison of interstate and international travellers and the frequency at whi VFR: Visiting friends and relatives

# **Results**

- Overall, 68% (124/182) sought pre-travel advice
  - 60% (75/124) spoke with an obstetrician
  - 30% (37/124) spoke to a general practitioner
  - · Only one woman attended a travel clinic
- Travellers delivering privately were more likely to consult an obstetrician (90%, 85/94)
- Travellers delivering publicly were more likely to consult a general practitioner (67%, 35/51)
- Overall, pre-travel advice was sought least by those visiting friends/relatives (VFR) (61%, 35/57)
- Most women did not recall infectious disease prevention advice in line with CDC recommendations

| Infectious disease prevention topic | Proportion of women for whom this topic is relevant | Proportion of women who recalled advice regarding this topic |
|-------------------------------------|---|--|
| Hepatitis A vaccination             | 17/64 (26.6%)                                       | 0/17 (0%)  |
| Typhoid vaccination                 | 17/64 (26.6%)                                       | 0/17 (0%)  |
| Hepatitis B vaccination             | 8/64 (12.5%)  | 0/8 (0%)   |
| Antimalarials – recommended         | 12/64 (18.8%)                                       | 0/12 (0%)  |
| Antimalarials considered            | 5/64 (7.8%)   | 0/5 (0%)   |
| Standby Anti-diarrhoeals            | 26/64 (40.6%)                                       | 2/26 (7.7%)  |
| Food and water precautions          | 29/64 (45.3%)                                       | 15/29 (51.7%)  |
| Travellers' diarrhoea avoidance     | 30/64 (46.9%)                                       | 4/30 (13.3%)   |
| Mosquito avoidance                  | 32/64 (50.0%)                                       | 14/32 (43.8%)  |
| Malaria avoidance                   | 19/64 (29.7%)                                       | 6/19 (31.6%)   |
| Zika avoidance                      | 28/64 (43.8%)                                       | 7/28 (25.0%)   |

Table 2: The proportion of women for whom each infectious disease prevention topic was relevant to as recommended by the CDC guidelines, and the proportion of these women who recalled discussions regarding this topic

# Conclusion

- Travel is common in pregnancy
- Women seek pre-travel advice from the provider they see most often during pregnancy rather than making specific travel-related appointments
- Further work is needed to educate and provide resources to maternity care providers to optimise pre-travel counselling

References: 1. Kanhutu K, Torda A. Travel and pregnancy: an infectious diseases perspective. Obstetric medicine. 2011;4(2):53-8. 2. Antony KM, Ehrenthal D, Evensen A, Iruretagoyena II. Travel During Pregnancy: Considerations for the Obstetric Provider. Obstetrical & gynecological survey. 2017;72(2):97-115