

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



Epworth  
Research

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## Introduction

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

## Aim

- 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 correlated with Centers for Disease Control (CDC) recommendations

## 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)

Comparison of travel frequency by model of healthcare

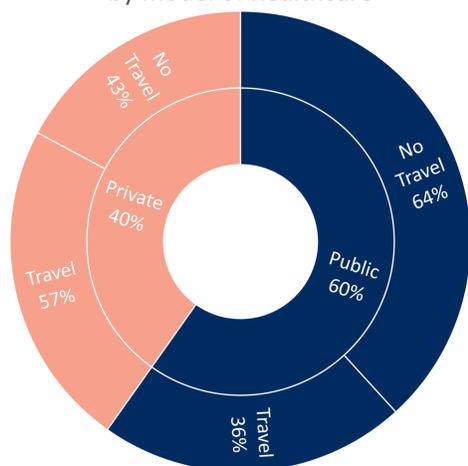


Figure 1: Comparison of travel frequency by model of healthcare

Reasons for travel

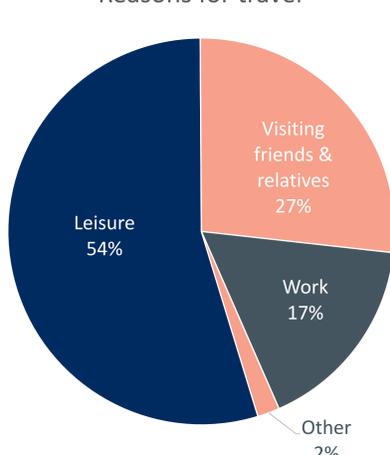


Figure 2: Reasons for travel in pregnancy

## 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)

Comparison of interstate and international travel numbers and the frequency at which pre-travel advice was sought

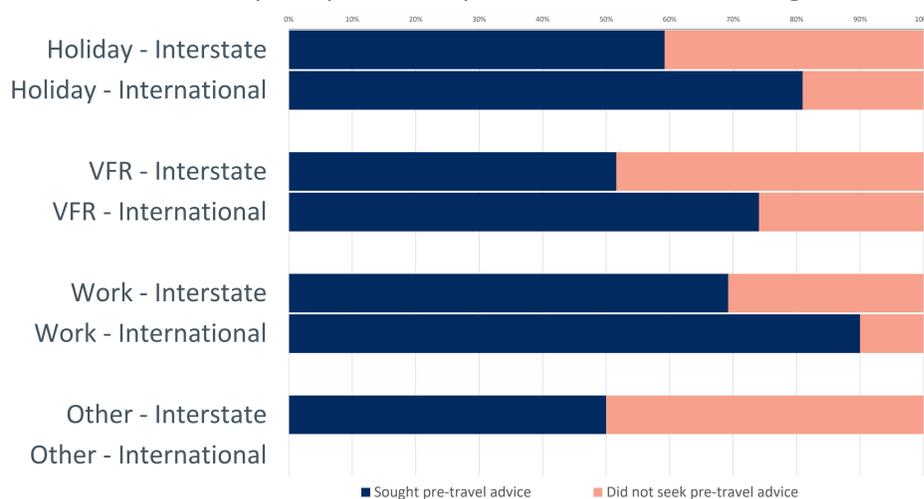


Figure 3: Comparison of interstate and international travellers and the frequency at which pre-travel advice was sought VFR: Visiting friends and relatives

- 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

## Conclusions

- 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