

ASYMPTOMATIC BACTERIURIA IN PREGNANCY: A LONGITUDINAL DESCRIPTIVE STUDY

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INTRODUCTION

- Presence of Significant number of bacteria in the urine without symptoms.
- Affects 2-7% of pregnant women.
- Associated with maternal and foetal adverse outcome.

OBJECTIVES

- To determine the rate of asymptomatic bacteriuria (ABU) in pregnancy
- To describe the risk factors associated with ABU in pregnancy
- To describe the common causative organisms and their antibiotic sensitivity pattern
- To determine the cure rate following treatment with sensitive antibiotics

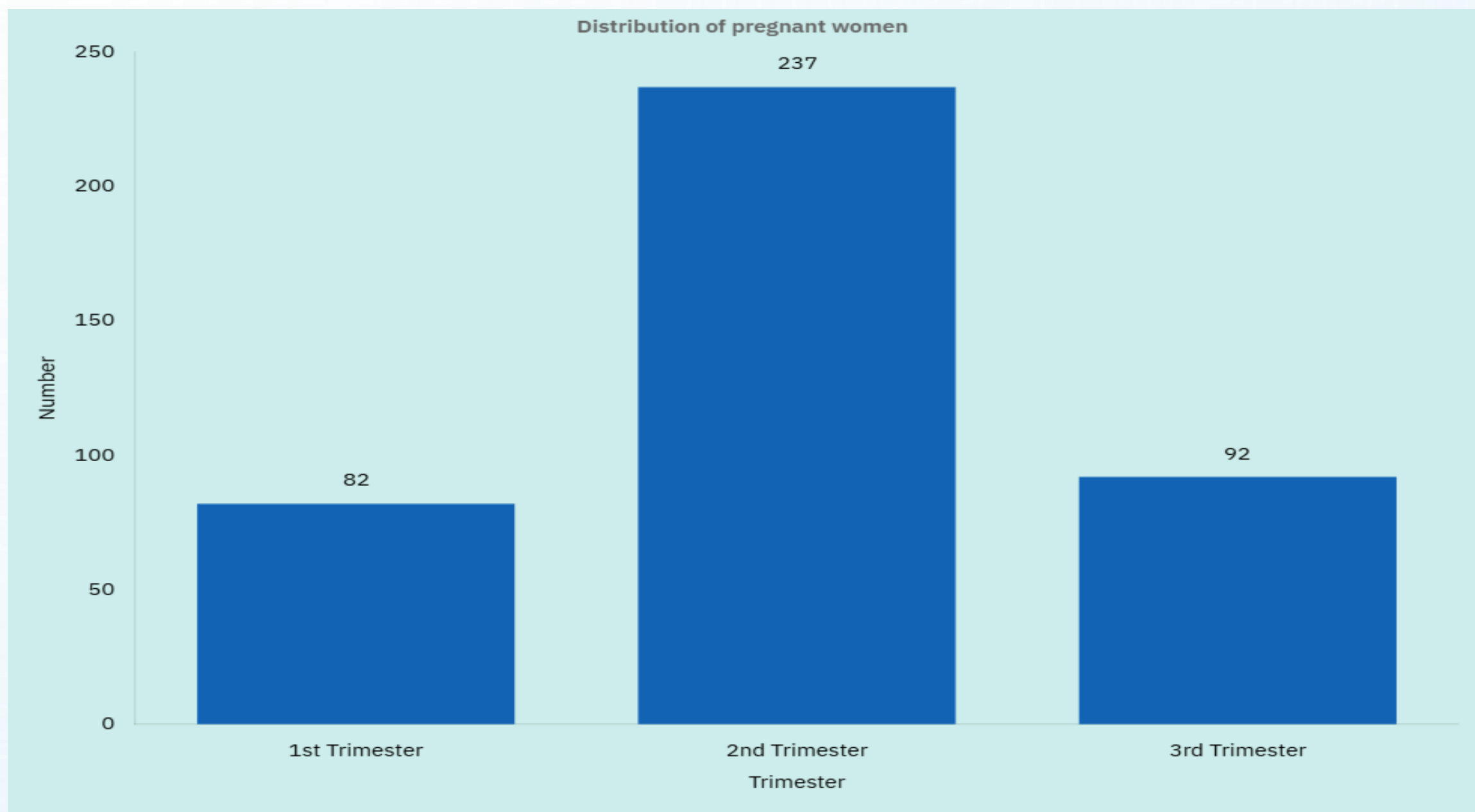
DESIGN

- This is a longitudinal descriptive study.

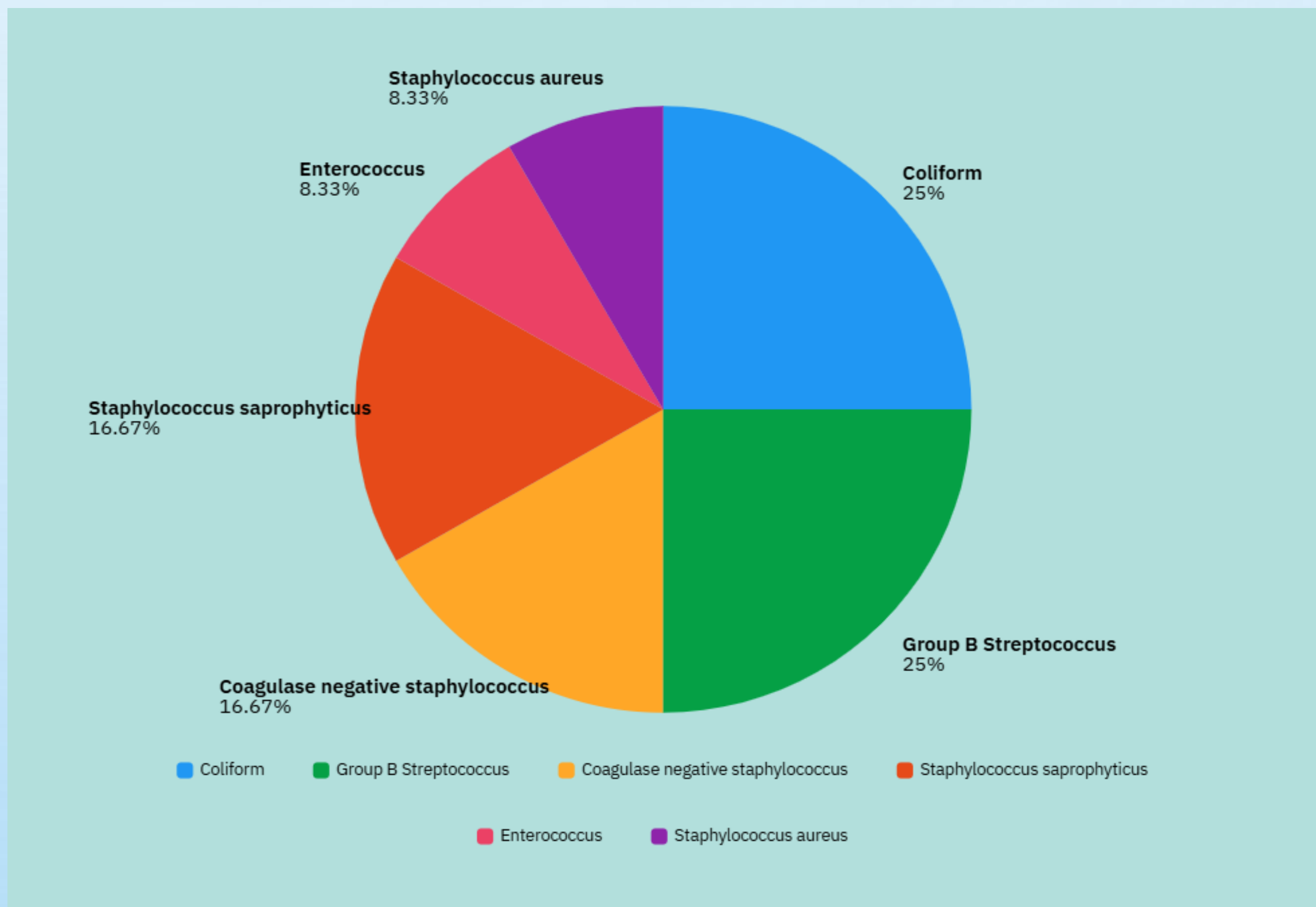
METHOD

- 411 Pregnant women attending the antenatal clinic for booking visit in Teaching Hospital Peradeniya, Sri Lanka were recruited
- Educated on how to collect midstream clean catch urine sample with a leaflet
- A colony count of more than 10^5 per ml of urine was considered a culture positive.
- Culture positive samples further underwent antibiotic sensitivity testing.
- Culture positive women were treated with sensitive antibiotics for 7 days and another urine culture was performed in one week to confirm the cure.

RESULTS



- A statistically significant association was noted between ABU and Gestational Diabetes Mellitus in the current pregnancy ($p = 0.0037$) and a history of asymptomatic bacteriuria ($p = 0.0027$).
- 12 women (2.9%) had significant bacteriuria.



Antibiotic	Sensitivity pattern (n=12)			
	Sensitive	Intermediate	Resistant	Not Tested
Penicillin	2 (16.67%)	0	10 (83.33%)	0
Ampicillin	4 (33.33%)	0	8 (66.67%)	2 (16.67%)
Cefuroxime	1 (8.33%)	0	2 (16.67%)	9 (75%)
Co-amoxiclav	2 (16.67%)	1 (8.33%)	0	9 (75%)
Cefotaxime	0	0	2 (16.67%)	10 (83.33%)
Ceftriaxone	0	0	1 (8.33%)	11 (91.66%)
Nitrofurantoin	7 (58.33%)	2 (16.67%)	3 (25%)	0
Gentamycin	1 (8.33%)	0	0	11 (91.66%)
Amikacin	1 (8.33%)	0	0	11 (91.66%)
Piperacillin/Tazobactam	1 (8.33%)	0	0	11 (91.66%)
Meropenem	1 (8.33%)	0	0	11 (91.66%)
Vancomycin	1 (8.33%)	0	0	11 (91.66%)
Cloxacillin	4 (33.33%)	0	1 (8.33%)	7 (58.33%)

- Following treatment nine (75%) of them had negative urine culture, one (8.33%) had mixed growth and two (16.67%) of them defaulted follow-up.

CONCLUSION

- Pregnant women should be screened at early pregnancy for ABU and those with ABU should be treated with antibiotics.
- Follow-up cultures should be arranged following treatment to confirm sterility of urine.