

A STUDY OF THE KNOWLEDGE, ATTITUDES AND PRACTICES OF COMMUNITY PHARMACISTS TO ANTIBIOTIC RESISTANCE IN TRINIDAD

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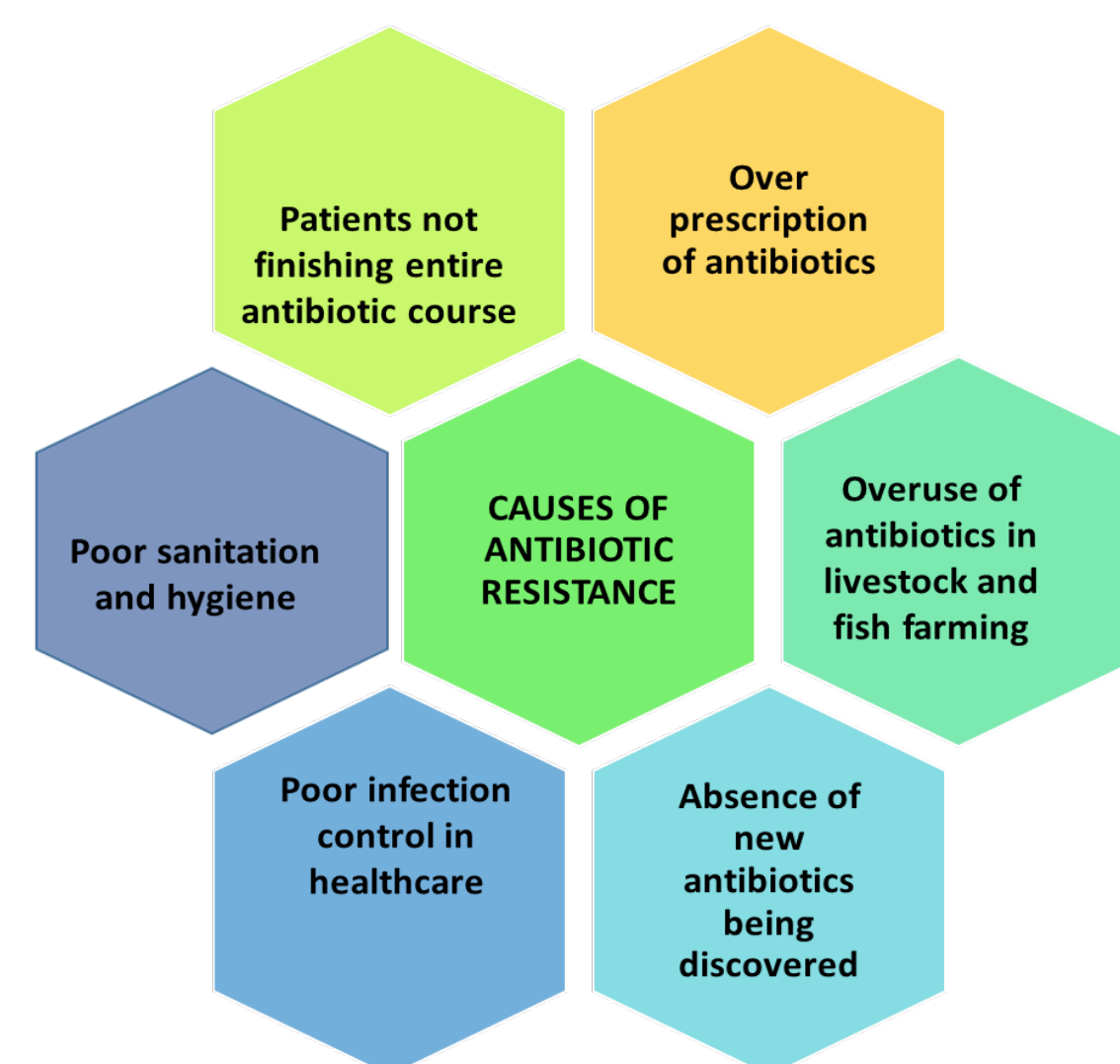
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Introduction

- Antibiotic misuse accelerates the natural process of development of antibiotic resistance
- The increasing antibiotic ineffectiveness is a threat to the practice of medicine, leading to an increase in morbidity and mortality as there are an estimated 750,000 deaths annually due to bacteria resistant sepsis
- The presence of multi-drug resistant bacteria in North American and Europe has implications for the Caribbean
- Education plays an important role in tackling antibiotic resistance
- Although Caribbean physicians are aware of antibiotic resistance, this knowledge does not affect prescribing habits
- Previous research among pharmacy students in Trinidad identified good knowledge, but the attitude towards use of antibiotics was poor
- Research among pharmacists in Brazil identified causes of antibiotic resistance but the role of the law was not explored



Objectives

- 1) To determine the level of knowledge regarding antibiotic resistance among community pharmacists in Trinidad
- 2) To evaluate the attitudes of pharmacists in Trinidad toward the sale of antibiotics to customers without a valid prescription
- 3) To assess pharmacists' perception of their role in the fight against antibiotic resistance

Methodology

A prospective cross-sectional survey was conducted among licensed pharmacists across Trinidad using purposive and snowball sampling

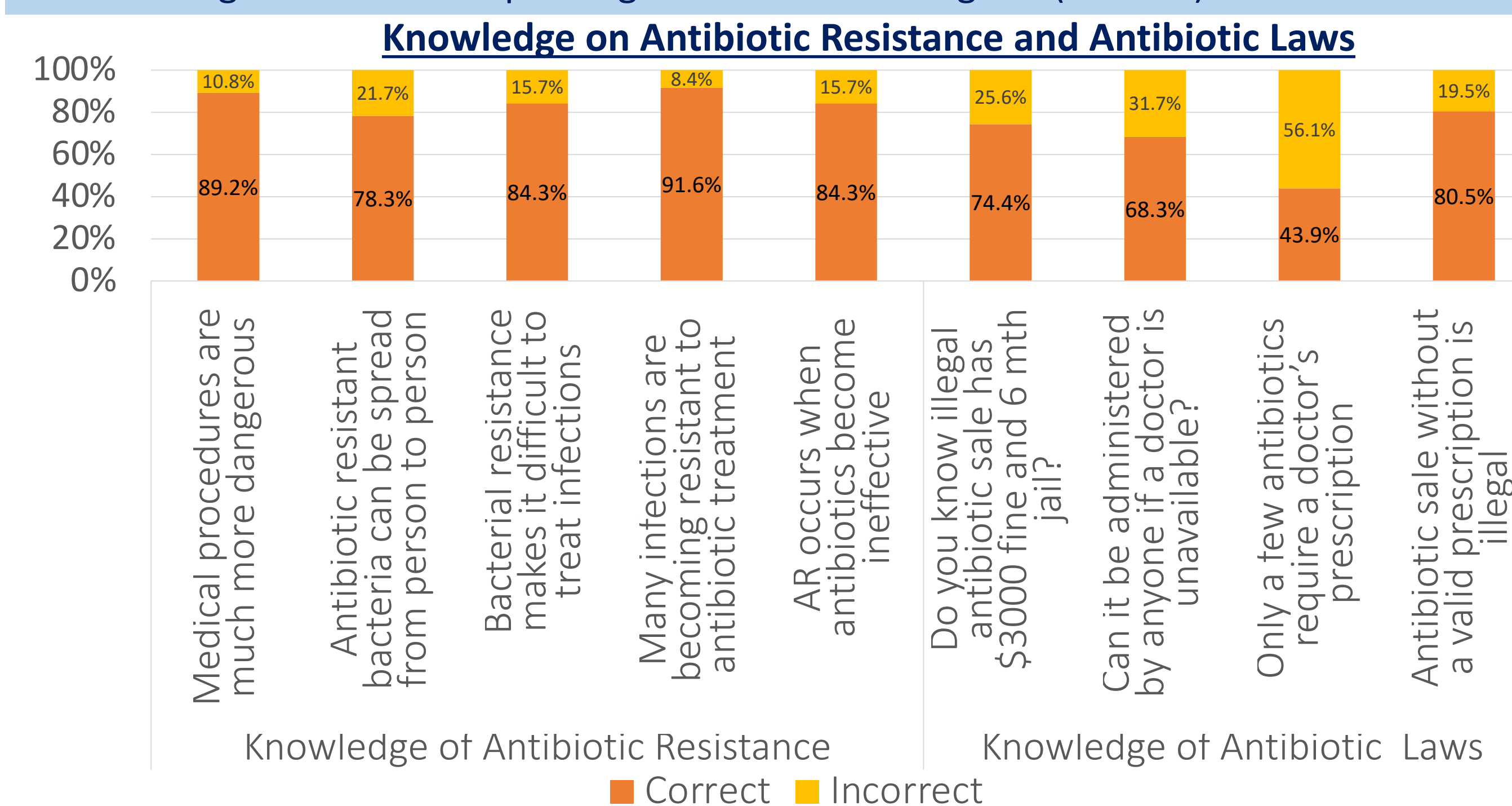
150 online questionnaires were distributed before a minimum sample size of 80 responses were received

Once consent for participation was obtained, data was collected on

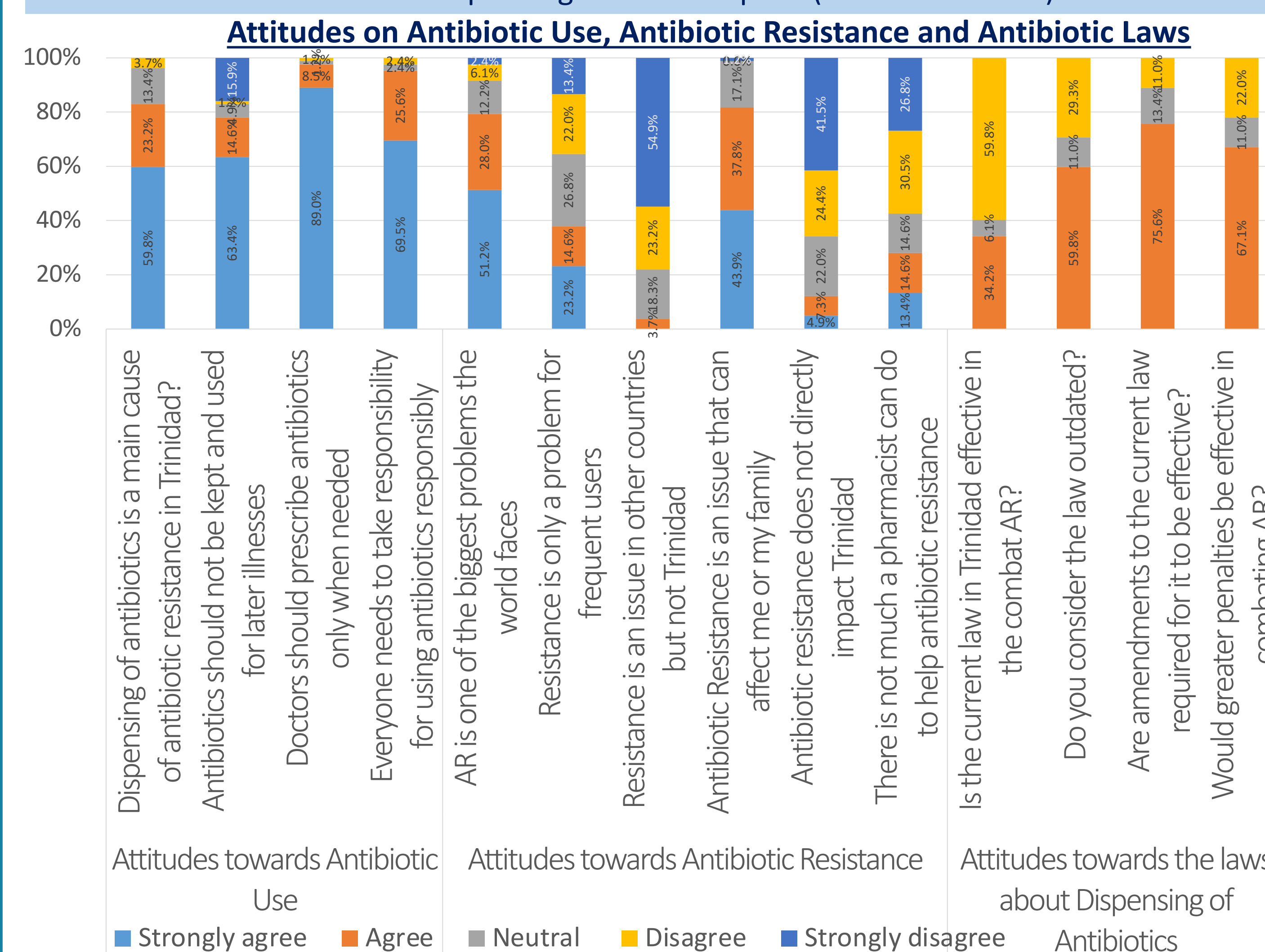
- Knowledge of antibiotic resistance and local laws
- Attitudes towards antibiotic use, antibiotic resistance and local laws
- Practices of dispensing antibiotics

Results

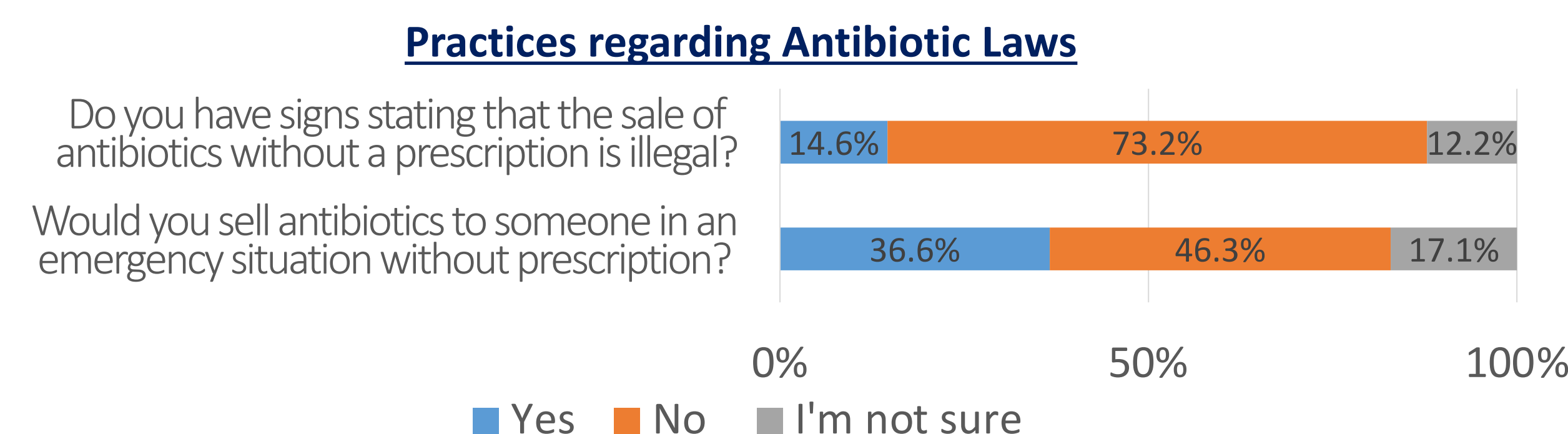
- 80 responses (53.3% response rate)
- Majority 25-34 years (65%), female (61.3%), in practice 3-6 years (57.5%)
- Knowledge of antibiotic resistance: very good (78-92%)
- Knowledge of laws for dispensing antibiotics: fair to good (44-81%)



- Attitude towards antibiotic use: very good (78-98%)
- Attitude towards antibiotic resistance: varied from poor to good (35-82%)
- Attitude towards laws for dispensing antibiotics: poor (11-34% satisfied)



- Practice regarding reminders not to dispense without a prescription: poor (15%)
- Practice regarding dispensing without a prescription: fair (46%)



Discussion

- The majority of community pharmacists demonstrated very good knowledge of antibiotic resistance and though they reported good knowledge of the laws and penalties regarding dispensing of antibiotics in Trinidad and Tobago, their practice was not positively impacted by this information, since more than one third would dispense without a prescription
- The attitude toward the laws may be partially responsible for some of the reported behaviour, since most respondents considered the laws outdated and supported amendments
- The large support for additional penalties to combat antibiotic resistance seems at odds with the reported practice of dispensing without a prescription

Conclusions

- Community pharmacists
 - had a very good level of knowledge on antibiotic resistance and use of antibiotics
 - had a fair level of knowledge of the laws that prohibit over the counter sale of antibiotics
 - were aware of the impact of antibiotic resistance and their perceived role in combating the problem
 - expressed the view that the laws were ineffective and need to be revised with stiffer penalties
- Some community pharmacists will still sell antibiotics without a prescription
- Interventions are needed to sensitize individuals and review the laws

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Acknowledgements

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