

INTRODUCTION

Antibiotic prescribing is a multifaceted process which requires knowledge of pathogen characteristics as well as patient and drug characteristics.¹ Medical practitioners' perceptions and attitudes towards the use of antibiotics in treating an infection influence the decision to prescribe antibiotics and the selection of the appropriate antibiotic.² Collaboration between medical practitioners and pharmacists, each with their respective expertise, can lead to major improvements in patient care.³

AIMS

To assess prescribing practices by physicians and to describe their perception on competencies of pharmacist prescribing and risks presented by such prescribing.

METHOD

- A questionnaire entitled 'Antibiotic Prescribing Practices Questionnaire' was developed to assess antibiotic prescribing practices by physicians and their perception of potential antibiotic prescribing by pharmacists.
- The questionnaire was disseminated to 376 medical practitioners practising in primary and secondary care in Malta.
- A two-round Delphi was adopted to validate the questionnaire.

Which factors influence your choice of antibiotics?
What risks might the patient be exposed to if pharmacists were to prescribe antibiotics?
How competent, from a scale of 0 to 4, would you rate pharmacists' ability to prescribe broad-spectrum antibiotics to treat common infections?
Why are you against pharmacists being given limited antibiotic prescribing rights?

Table 1: Questions included in the questionnaire

RESULTS

- 154 medical practitioners answered the questionnaire.
- 'Diagnosis' was the major factor (92%) influencing physician's choice of antibiotics (Figure 1).
- Pharmacists are regarded as being competent to treat common infections on a five-point Likert scale by 8% of physicians, 37% have no opinion and 14% think pharmacists are not competent.
- The three most commonly cited reasons against pharmacist prescribing are that pharmacists are not qualified to clinically examine patients (78%), pharmacists do not have access to patient medical records (60%) and that local pharmacies' setting lack privacy (49%).

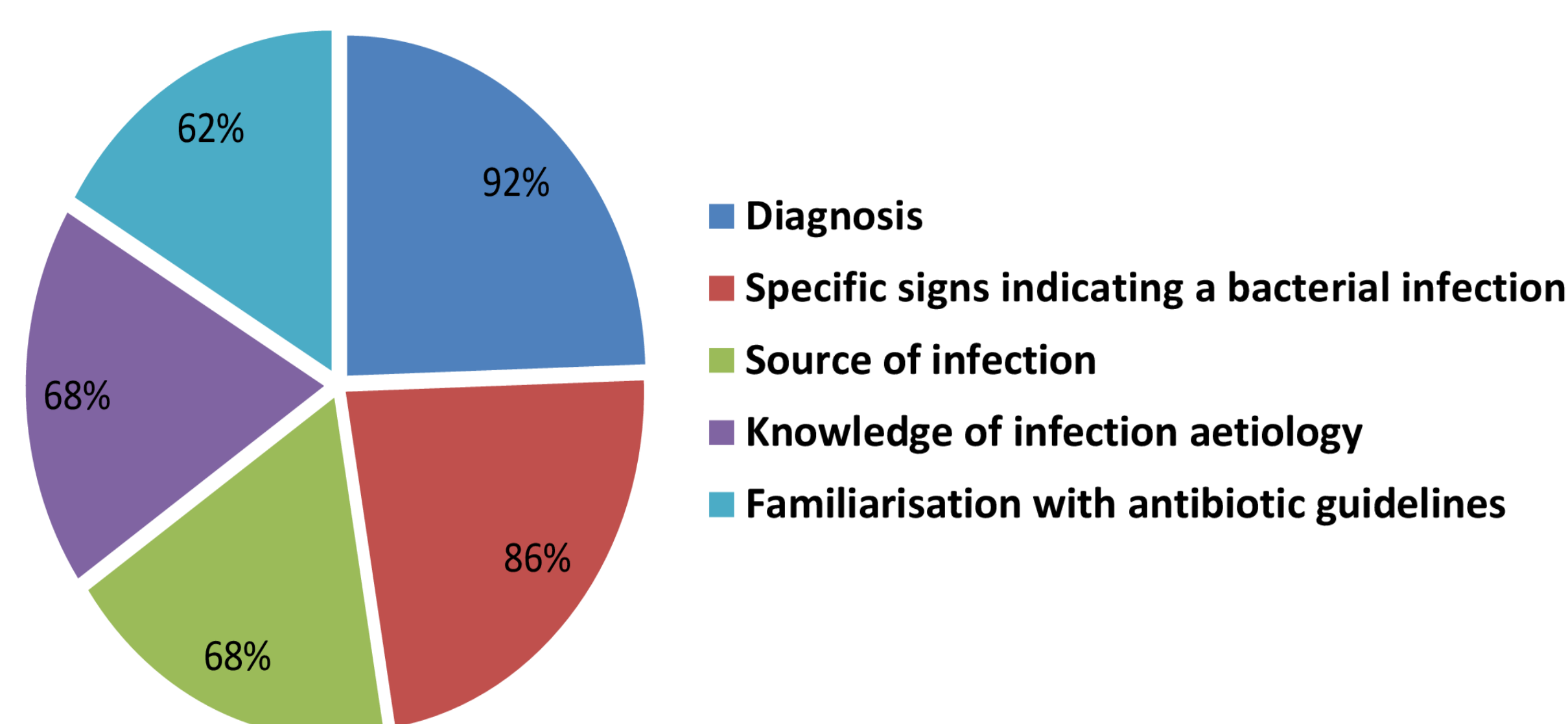


Figure 1: Factors indicated by medical practitioners as influencing their choice of antibiotics (N=154)

- The three most significant risks of pharmacist prescribing were perceived by physicians to be misdiagnosis (53%), development of antibiotic resistance (52%) and therapeutic failure (49%).

CONCLUSION

Physicians state that a physical examination influences their prescribing of antibiotics. They assign the concept of lack of physical examination competence by pharmacists to be a determining factor in their lack of support for establishing a national structure to enable pharmacist prescribing. A collaborative approach between medical practitioners and pharmacists should be evaluated as a possible national structure towards achieving better antibiotic prescribing while decreasing the medical practitioner perception of the risk of misdiagnosis by independent pharmacist prescribing.

References

1. Lee CR, Lee JH, Kang LW, Jeong BC, Lee SH. Educational effectiveness, target, and content for prudent antibiotic use. *BioMed Research International* 2015; 13 pages.
2. Adorka M, Dikokole M, Mitonga KH, Allen K. Healthcare providers' attitudes and perceptions in infection diagnosis and antibiotic prescribing in public health institutions in Lesotho: a cross-sectional survey. *African Health Sciences* 2013;13 (2):344-350.
3. Azhar S, Hassali MA, Ibrahim MIM. Doctors' perception and expectations of the role of the pharmacist in Punjab, Pakistan. *Tropical Journal of Pharmaceutical Research* 2010;9(3):205-222.