

INTRODUCTION

Risk-benefit analysis contributes significantly to many decision-making processes.¹ In the use of medicinal products, objective benefit:risk assessments based on quantitative evaluations of the probability of harm and benefit are very restricted due to the absence of an appropriate tool. The benefit of a drug can be measured in terms of therapeutic efficacy, whereas risks can be measured by taking into account the drug's safety profile.²

AIMS

- To develop a tool for pharmacists practising in Malta to help in the objective risk assessment of prescribing antibiotics
- To evaluate pharmacist perception of potential antibiotic prescribing by pharmacists

METHOD

- A questionnaire serving as a tool to quantify the potential risk of having pharmacists prescribing antibiotics was developed.
- This tool was based on the results of a questionnaire intended for physicians developed by the authors.^{3,4}
- The Delphi technique was adopted to validate the questionnaire and a heterogeneous group comprising of 5 members was formed.
- The group was made up of:
 - 3 community pharmacists
 - 1 physician
 - 1 lay person

- A two-round Delphi consisting of a structured five point Likert scale questionnaire anchored by 1 when there is least agreement and 5 when there is highest agreement was undertaken. Participants could amend the question in the 'Recommended Changes' field provided and add other comments in the 'Remarks' section.
- After addressing the suggestions and recommendations generated during the two Delphi Rounds, the final version of the 'Antibiotic Prescribing by Pharmacists Questionnaire' was disseminated to all pharmacists practising in Malta (N=930).

RESULTS

- The developed questionnaire contains 40 close-ended questions with 3 different sections.
- 209 questionnaires were collected, resulting in a margin of error of 6%.
- When pharmacists were asked to rate the importance of drug-related factors when potentially prescribing antibiotics, 84% replied that the activity of antibiotic against the most likely pathogen present is the most important, followed by allergic reactions (73%) and contra-indications (72%).
- Figure 1 shows the risks, as perceived by respondents, patients might be exposed to if pharmacists do not take these factors into consideration when potentially prescribing antibiotics.

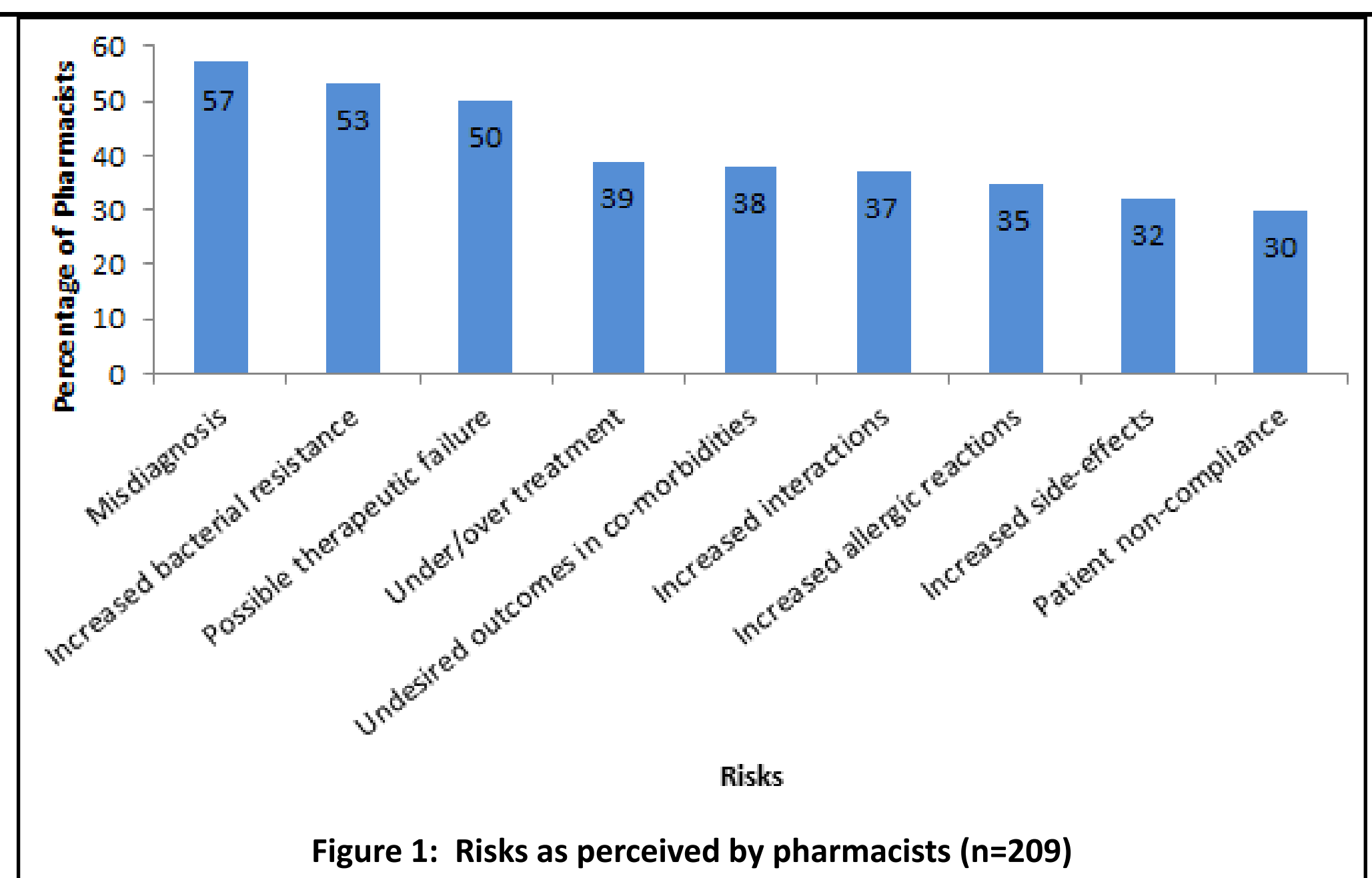


Figure 1: Risks as perceived by pharmacists (n=209)

- 50% of pharmacists feel competent or highly competent prescribing antibiotics, 34% (n=70) have no opinion and 16% (n=34) do not feel competent or not competent at all.
- Pharmacists were asked what antibiotic class they would prescribe first-line for specific infections. Most pharmacists (78%) are compliant with British National Formulary guidelines⁵ in the treatment of bacterial vaginosis, where metronidazole is the agent used.

CONCLUSION

Quantitative assessment of risk in pharmaceutical care processes presents many challenges. Whilst recognising the limitations, these risks must be overcome for it is ethically important to base decisions on objective data.

References

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