



# Physicians' Knowledge, Perception and Attitudes towards Antimicrobial Prescribing; a Cross-Sectional Study from Saudi Arabia

Abeer M. Albaadani<sup>1</sup>, Kamran Baig<sup>2</sup>, Wafa A. Alfahad<sup>3</sup>, Ali S. Omrani<sup>1</sup>

<sup>1</sup>Division of Infectious Diseases, <sup>2</sup>Department of Infection Control, <sup>3</sup>Department of Pharmacy, Prince Sultan Military Medical City, Riyadh, Saudi Arabia

## Introduction

Appropriate antimicrobial prescribing is important to improve clinical response, maximise efficiency and prevent the emergence of bacterial resistance. The aim of this study was to assess perceptions, attitudes and antimicrobial knowledge amongst physicians practising in the city of Riyadh, Saudi Arabia.

## Materials and Methods

Across-sectional survey study was undertaken during the period from 1 June to 31 August 2013. A 30-items, self-administered questionnaire was developed and distributed manually and through SurveyMonkey® to physicians working in 5 main hospitals in Riyadh, Saudi Arabia. The results were analysed using Microsoft Excel 2010 (Microsoft Inc. Redmond, WA, USA) and Stata 13 (StataCorp, College Station, TX, USA).

## Bibliography

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## Results

212 full responses were returned out of 250 sent (84.8%). The largest proportion of respondents was made up of residents (105, 49.5%), followed by consultants (48, 22.6%), specialists (31, 14.6%) and fellows (26, 12.3%). Just over half of the responses were received from male physicians (117, 55%). 61 respondents (28.8%) have been in practice for 3-5 years, compared with (47, 22.1%) for ≤2 years, (43, 20.3%) for 6-10 years and 61 (28.8%) >10 years. The majority were from physicians in medical specialties (126, 59.4%), followed by surgical specialties (37, 17.5%), critical care (27, 12.7%), accident and emergency (10, 4.7%) and obstetrics and gynaecology (7, 3.3%). Most of the respondents perceive antimicrobial resistance as a significant problem in their daily practice (119, 56.2%) and at a national level (148, 69.8%). The main contributor to increasing bacterial resistance is believed to be inappropriate empiric antimicrobial therapy by 101 respondents (47.6%), while (66, 31.1%) believe the main driver is excessive use of antimicrobials in healthcare settings. Respondents favour treating infection rather than colonisation (98, 46.2%) and physician education (74, 34.9%) as the most effective interventions to reduce antimicrobial resistance. Only 95 respondents (44.8%) feel confident about their knowledge of antimicrobial prescribing, whereas (26, 12.3%) do not feel confident at all. Only 135 respondents (63.7%) have local hospital antimicrobial guidelines, out of which only 90 (66.7%) felt were useful. Moreover, 61 (28.7%) do not receive any regular training on antimicrobial prescribing. The ID service was considered very helpful by 160 respondents (75.5%), whereas 11 (5.2%) felt the service is not helpful.

## Conclusion

Our study identified considerable unmet training and education need for physicians in the area of antimicrobial prescribing. Furthermore, it appears that local antimicrobial guidelines need revision to ensure they are more relevant and helpful for medical practitioners. Local infectious diseases services and antimicrobial stewardship programmes should take these data into account when planning and executing their activities.