

# Antimicrobial Prescribing Behaviour in the Emergency Department (ED)

Kathryn M. Ashton<sup>1</sup>, Dorothy Frizelle<sup>2</sup>, Stuart E. Bond<sup>2</sup>, Sarah Robertshaw<sup>3</sup>

1. Pharmacy Department, Pinderfields Hospital, Wakefield;

2. Department of Psychology, Pinderfields Hospital, Wakefield;

3. Emergency Department, Pinderfields Hospital

Corresponding author:kathryn.ashton@midyorks.nhs.uk. This study did not require ethics approval.

## Background

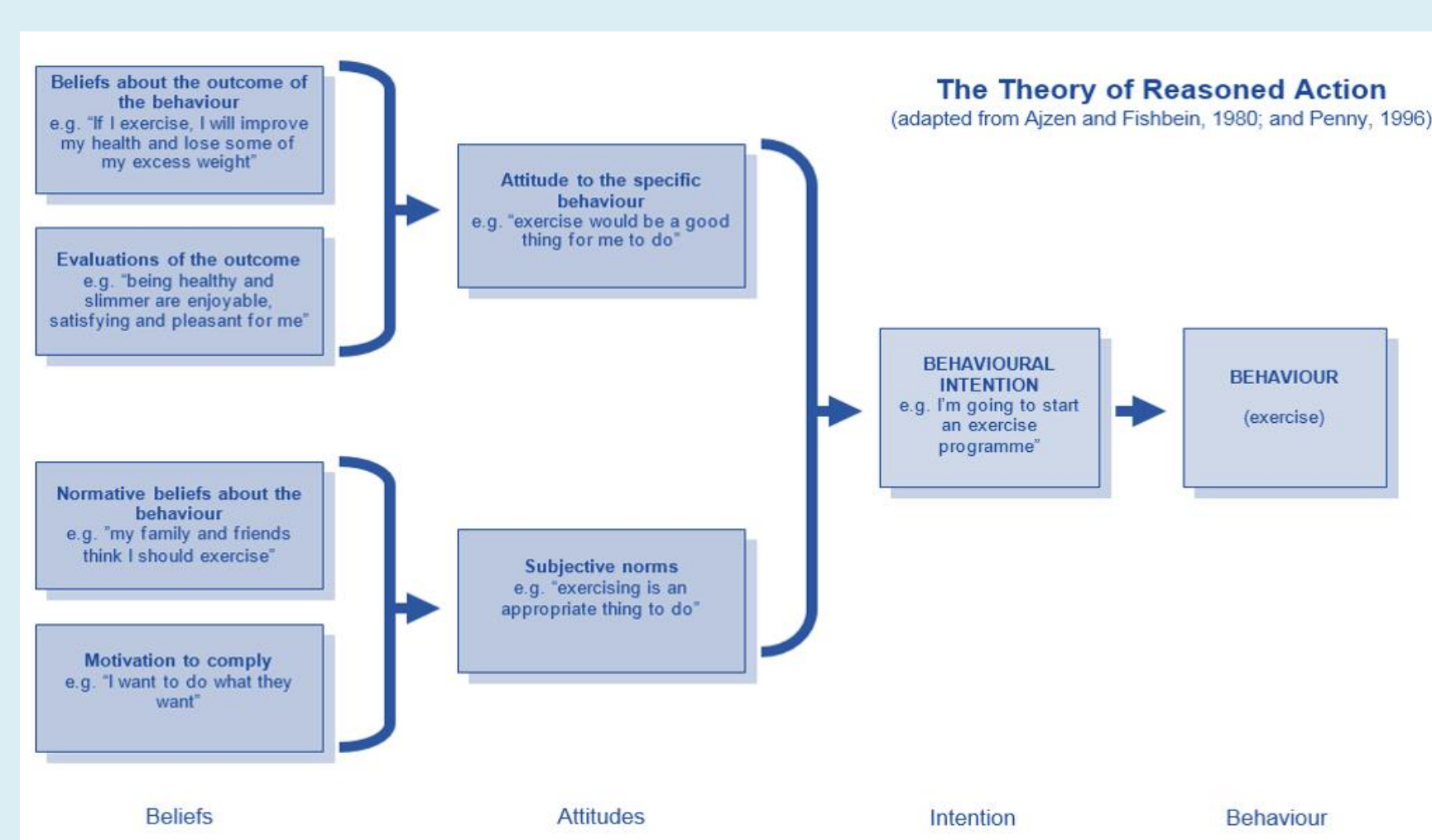
As the interface between inpatient and community settings the behaviour of prescribers in the ED has significant impact on antimicrobial prescribing across the healthcare economy. Uncertainties about pathogenesis, heavy workflow and patient's desire for antimicrobial therapy have been cited as motives for increased antimicrobial prescribing in existing research. There are limited studies that specifically examine antimicrobial prescribing behaviours in the unique environment of EDs.<sup>1,2</sup>

## Objective

To identify and understand the behavioural factors that influence antimicrobial prescribing in our own ED in order to enable the introduction of successful initiatives to reduce antimicrobial use.

## Methods

A short survey was compiled with the contribution of a clinical psychologist. A literature review was undertaken to assist survey design. The survey consisted of agreement with 13 statements, assessed using a 4-point Likert scale. The survey was issued to prescribers at Pinderfields ED by a pharmacist. Survey participants did not receive prior information about the survey.

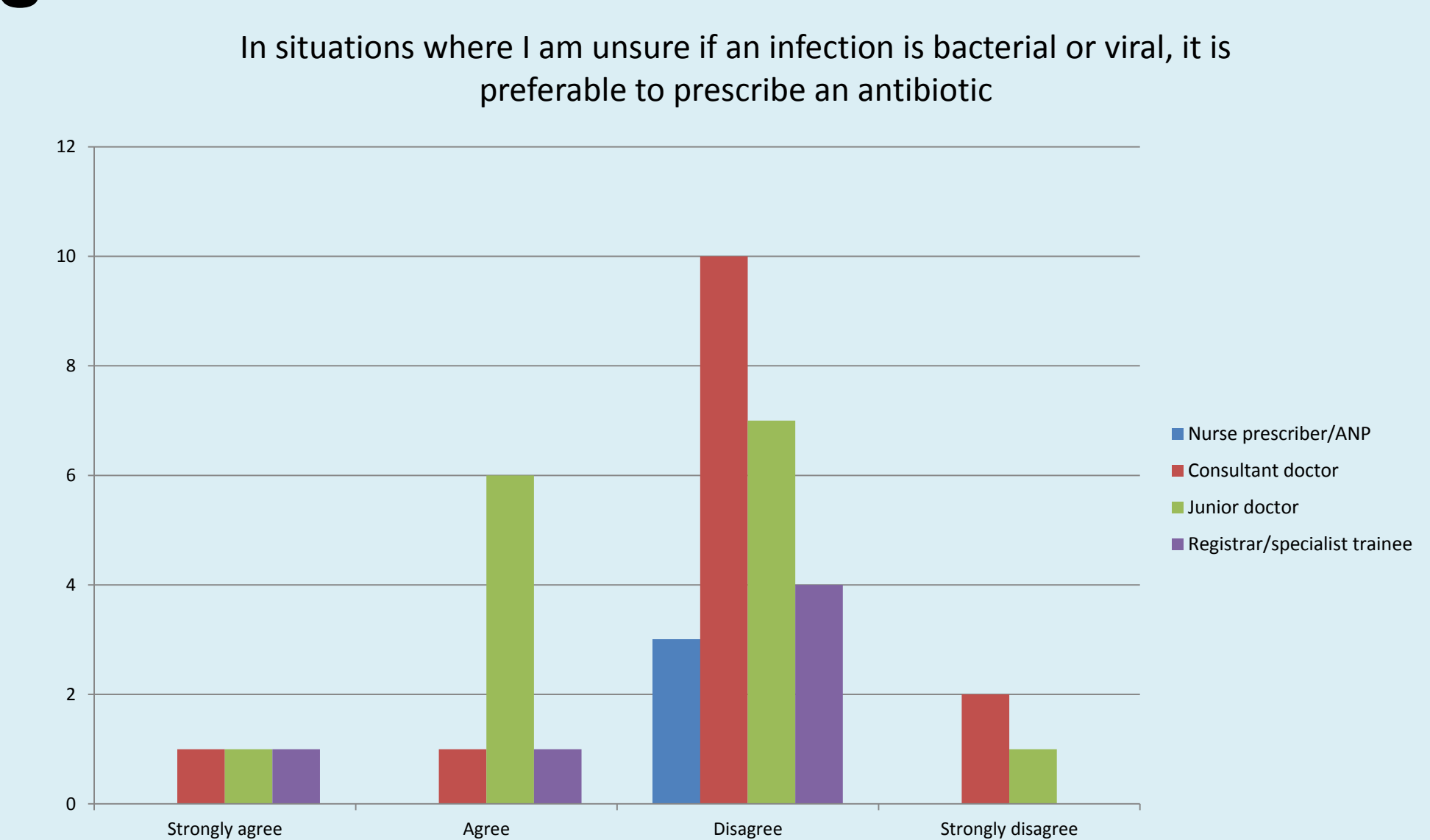


Statements were based on the principles of The Theory of Reasoned Action to explore beliefs, motivation and attitude towards antimicrobial prescribing.<sup>3</sup>

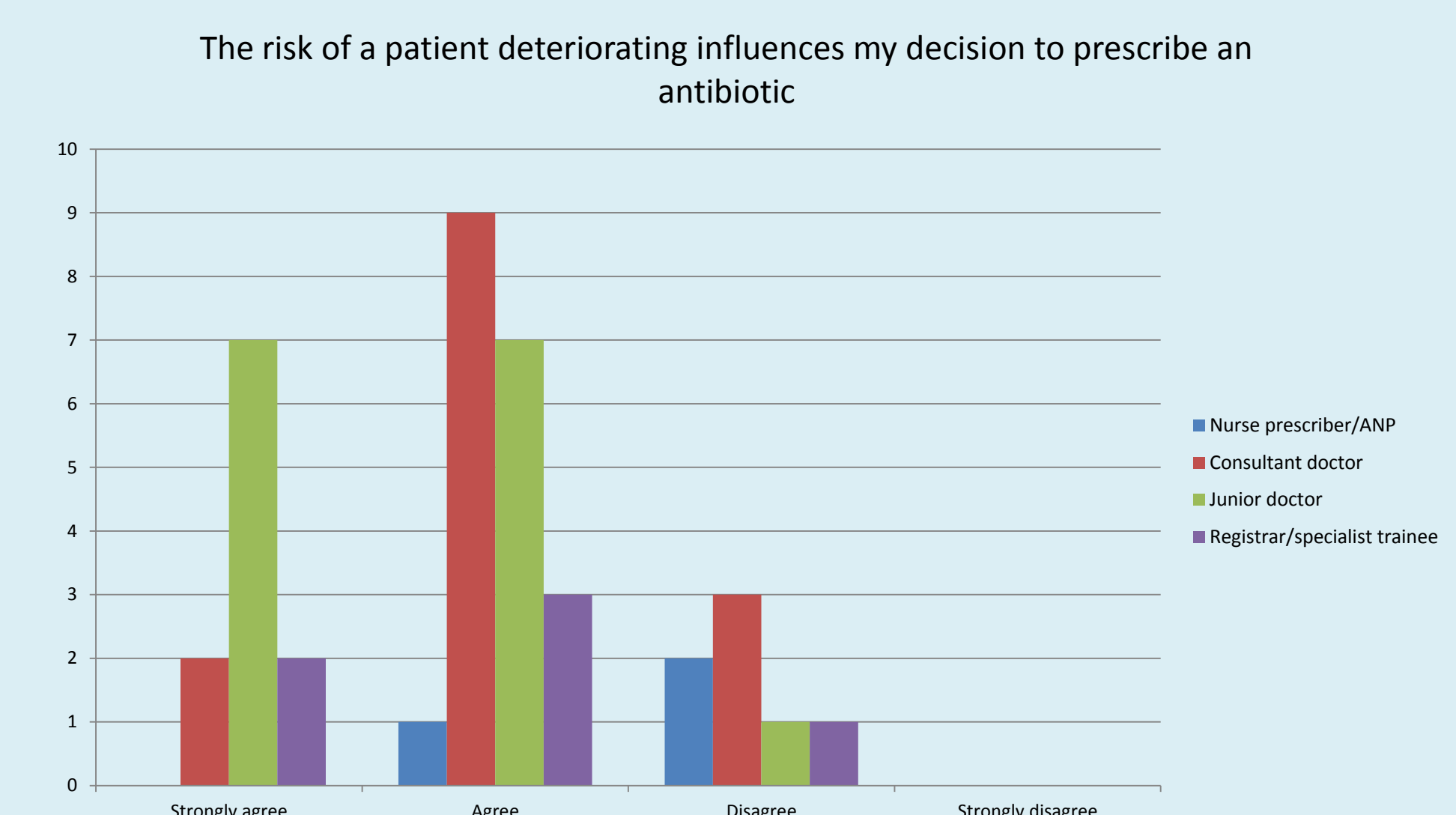
## Results

- 38 prescribers responded (14 consultant, 6 registrar, 15 junior doctor and 3 non-medical prescriber )
- 100% agreed appropriate antimicrobial prescribing is important to them
- 100% disagreed they prescribe antimicrobials due to patient expectation

### Attitudes



### Evaluation of Outcome



## Conclusions

Whilst prescribers in the ED believe that appropriate prescribing of antimicrobials is important it is temporally separated from moment-by-moment decisions in clinical situations due to the perceived risk of a patient deteriorating and uncertainty around diagnosis. Enablement strategies are therefore key to improve antimicrobial prescribing.<sup>2</sup> Timely feedback and post prescription review have been identified as a preferred intervention to improve confidence and positively re-inforce a culture of appropriate antimicrobial prescribing.

1. Slam F, et al. Antibiotic prescribing behaviour among general practitioners – a questionnaire based study in Germany. BMC Infectious Diseases 2018; 18:208

2. Davey P, et al. Interventions to improve antibiotic prescribing practices for hospital inpatients. Cochrane Database Systematic Review 2017; 2.

3. Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes 1991; 50: 179-211.