

RECOMMENDED ASP PROGRAM IMPLEMENTATION PLAN

Goals of the program

- ✓ Reduce inappropriate antimicrobial use
- ✓ Improve patient outcomes
- ✓ Reduce antimicrobial resistance, toxicity and unnecessary costs

STEP 1 : ENGAGE

Leadership Drive and culture building

STEP 2 : CONVENE ASP TEAM

Experts + Management Representatives (Permanent)] +[Senior Consultant + Resident (Rotary)] : Formulation of guidelines/ human decision support

STEP 3 : EDUCATE

Local Guidelines : Handbook/ Pocketbook / Mobile App

STEP 4 : EXECUTE

- ✓ **Grouping of antimicrobials (traffic light approach)**
- ✓ **Front end (Pre-authorization)**
- ✓ **Prospective audit and feedback**
- ✓ **Start smart and then focus**
- ✓ **Computer physician operated entry**

STEP 5 : EVALUATE

Process Indicators

- ✓ **PDD (Prescribed daily dose)**
- ✓ **DDD (Defined daily dose)**

Outcome Measures

- ✓ **Length of hospital stay**
- ✓ **Reduced bacterial resistance**

Quality Indicator (AM Bundle)

Filling of relevant information by clinical areas
Optimal microbiological representative samples
Possible upfront A/b Used?
How many attempts to de-escalate happened?

KAP SURVEY ABOUT ANTIMICROBIAL PRESCRIBING

Background

Antimicrobial resistance (AMR) is a global concern. This study evaluated knowledge, attitudes and practices about antimicrobial prescribing among consultants in hospital setting.

Aim

To gather knowledge about the gaps and barriers behind antimicrobial prescription among the healthcare staff to help formulate a strategic antimicrobial stewardship intervention for Manipal Hospital Jaipur.

Objectives

To assess the knowledge and explore the attitudes of physicians at Manipal Hospital, Jaipur to antimicrobial use in order to identify barriers to appropriate antimicrobial prescribing and stewardship formulation.

METHODOLOGY

Study Design: Descriptive cross sectional study
Data collection method : Self administered questionnaire to assess the knowledge, attitudes and practice (KAP) regarding antimicrobial prescription and stewardship practices
Sample Design: Purposive sampling.20 consultants at Manipal Hospital Jaipur were taken as the sample under study.

RESULTS

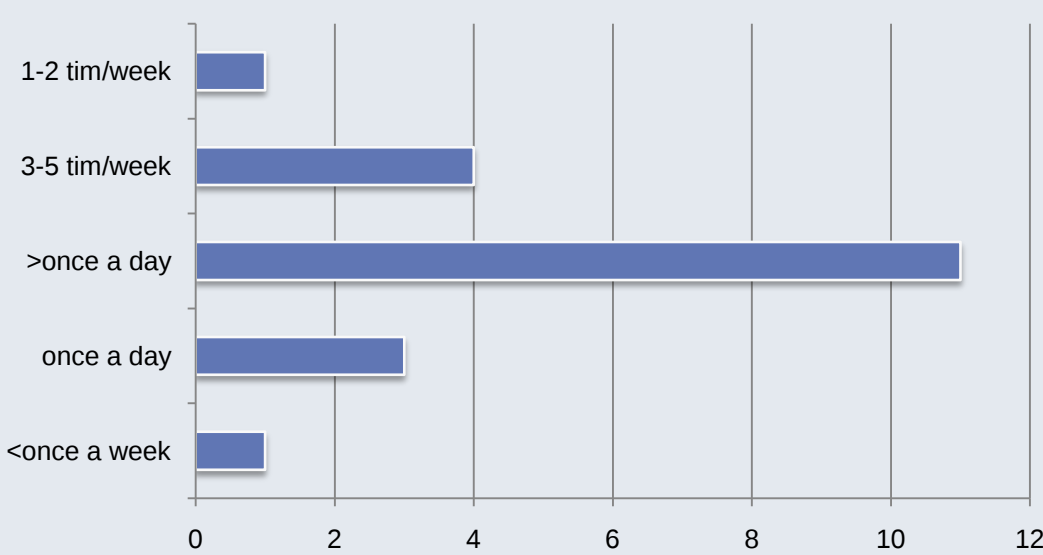


Fig. 1 Frequency of antibiotic prescribing in practice

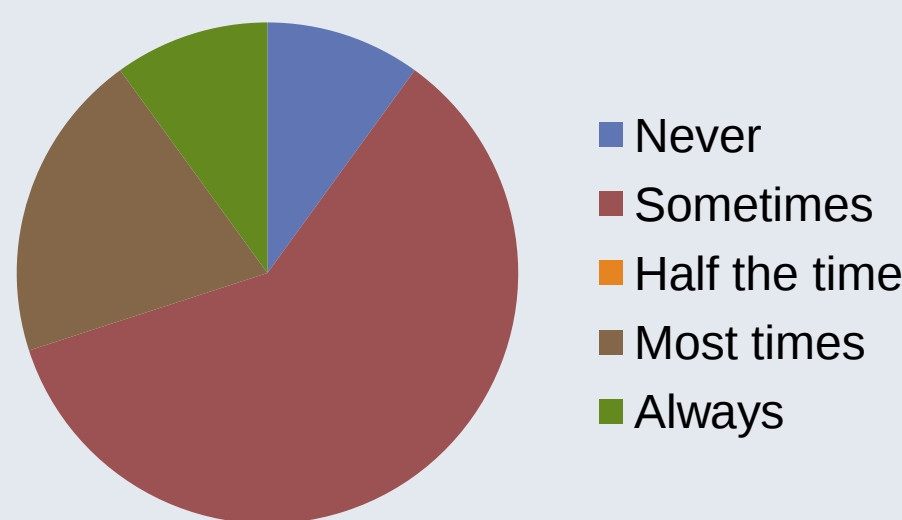


Fig. 2 Practice of reviewing antibiotic prescription with IDC

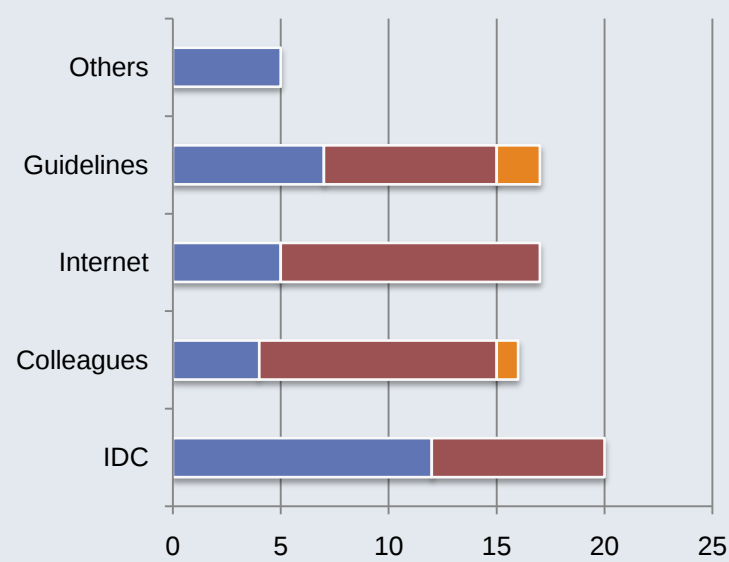


Fig. 3 Sources of information regarding antibiotics used and their perceived usefulness

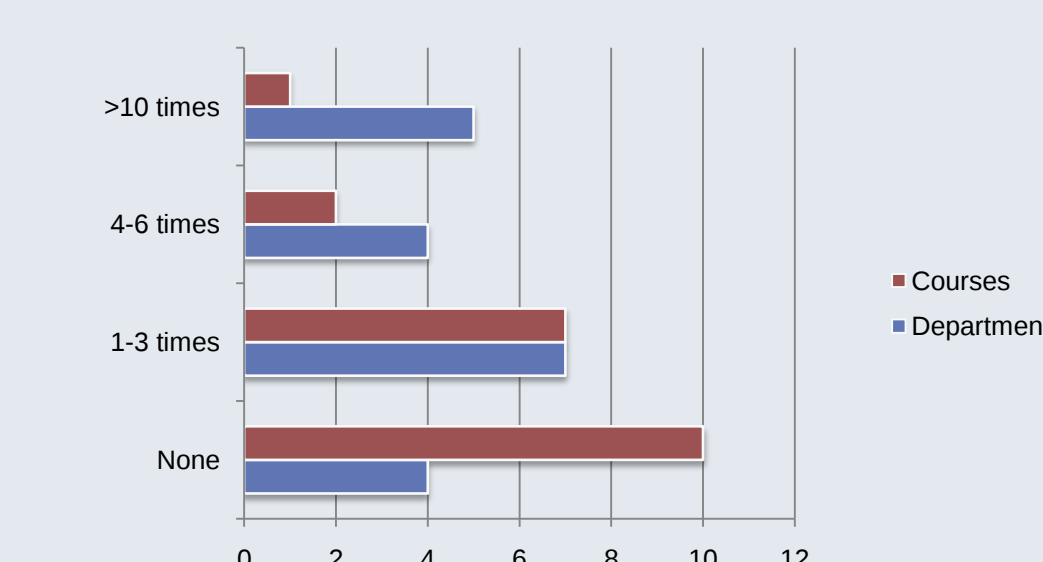


Fig. 4 Frequency of teaching regarding antibiotics

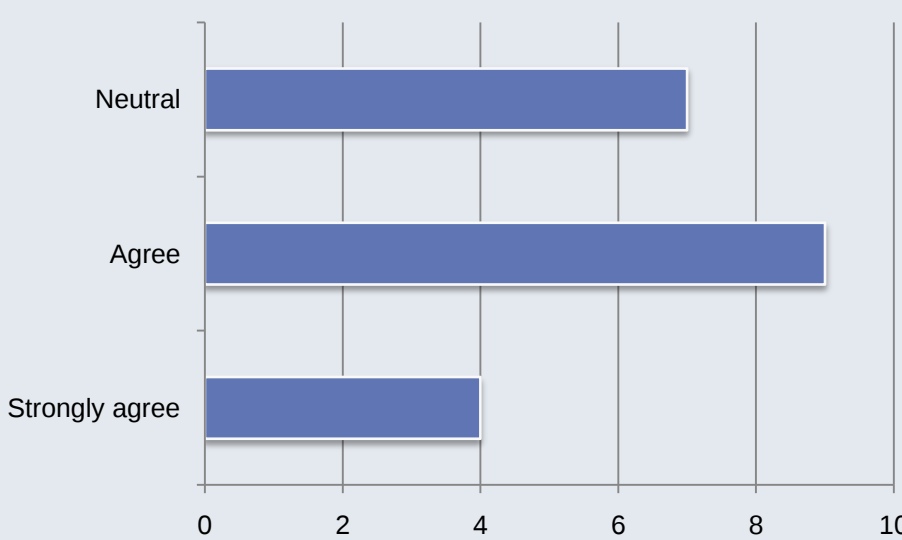


Fig.6 Practice of using an antibiogram before prescribing

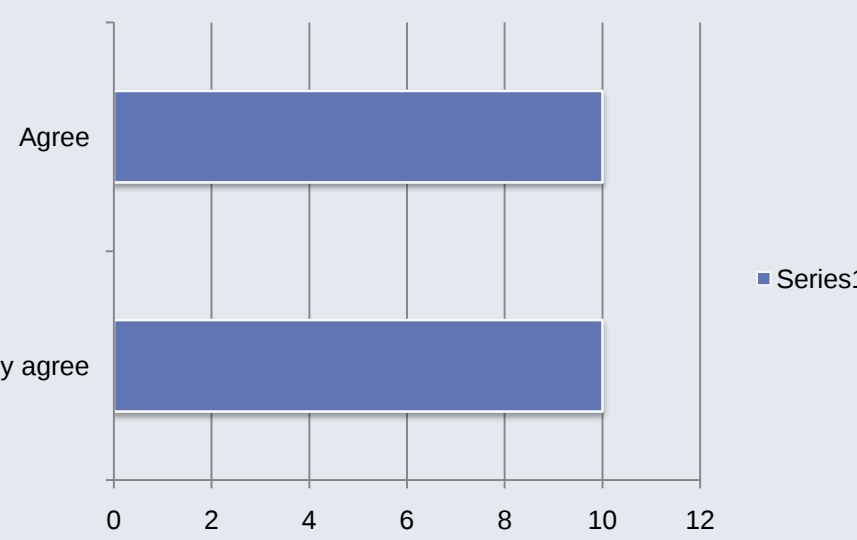


Fig. 7 Attitude towards introduction of an antimicrobial stewardship program

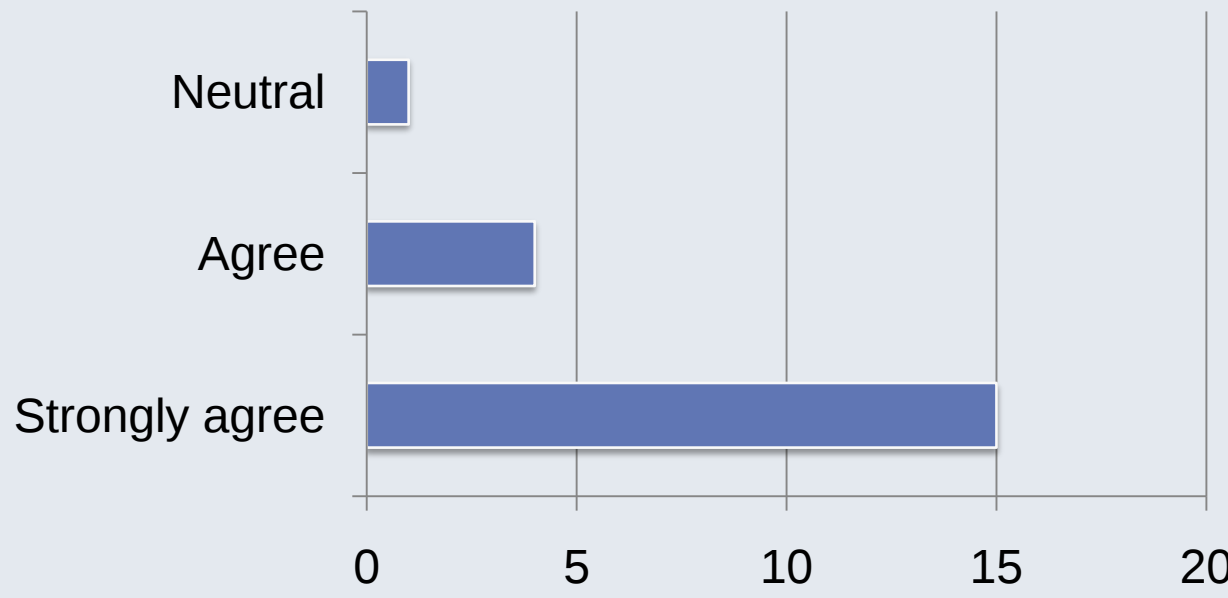


Fig. 7 Attitude towards organization of educational programs on antibiotics

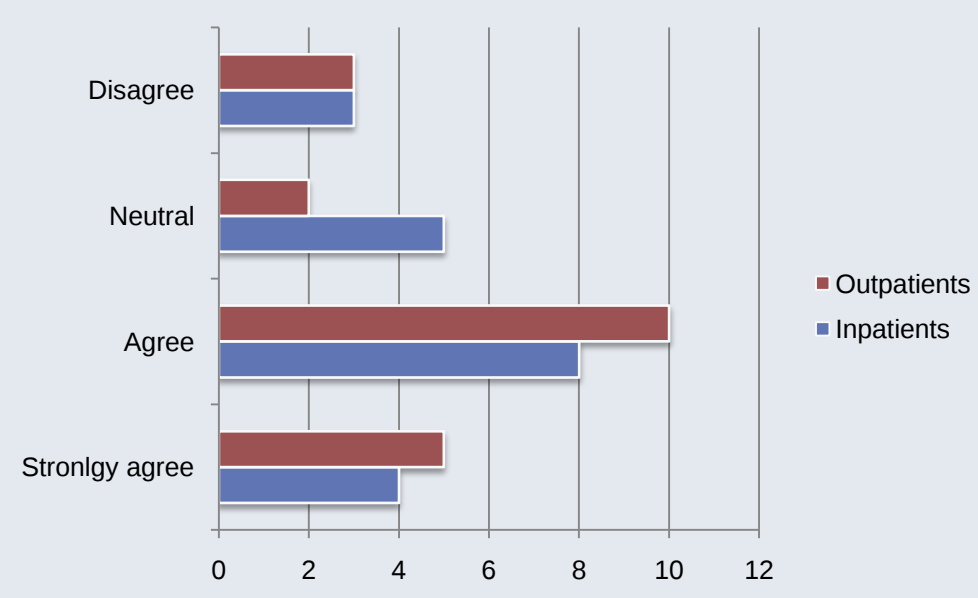


Fig. 8 Patients demands for antibiotics contribute to overuse

RECOMMENDATIONS

Gap	Intervention	Evaluation
Irregular teaching program in department	- Education (active) Clinical case discussions, rounds, educational outreach - Specialty specific modules of teaching	Competency assessment tests
Perception of sources of information regarding antibiotics as not very useful	Engagement on rotary basis with the antimicrobial stewardship program team (ASP)	Post intervention survey
Overprescribing due to patients' demand	Primary: prescriber education Secondary: patient education	Post intervention survey
Not consulting the infectious disease (ID) specialist frequently	- Educational outreach - Prospective audit and feedback by the ID specialist and the ASP team	Post intervention audit
Inadequate self documentation	Computerized physician order entry (CPOE)	Self evaluating intervention
Inadequate referral to antibiogram	Formulation of local guidelines and antimicrobial policy subject to audit and review by the ASP team and incorporating them into - CPOE - Pocketbooks (education)	Post intervention survey/audit of CPOE data

AUDIT- COMPLIANCE OF PROVISIONAL DIAGNOSIS RECORDING IN INPATIENT MEDICAL RECORDS

Aim

To gather and assess data in order to substantiate the establishment of an antimicrobial stewardship program at the hospital.

Objectives

To assess the compliance of completion of inpatient medical records under the head 'provisional diagnosis'.

Methods

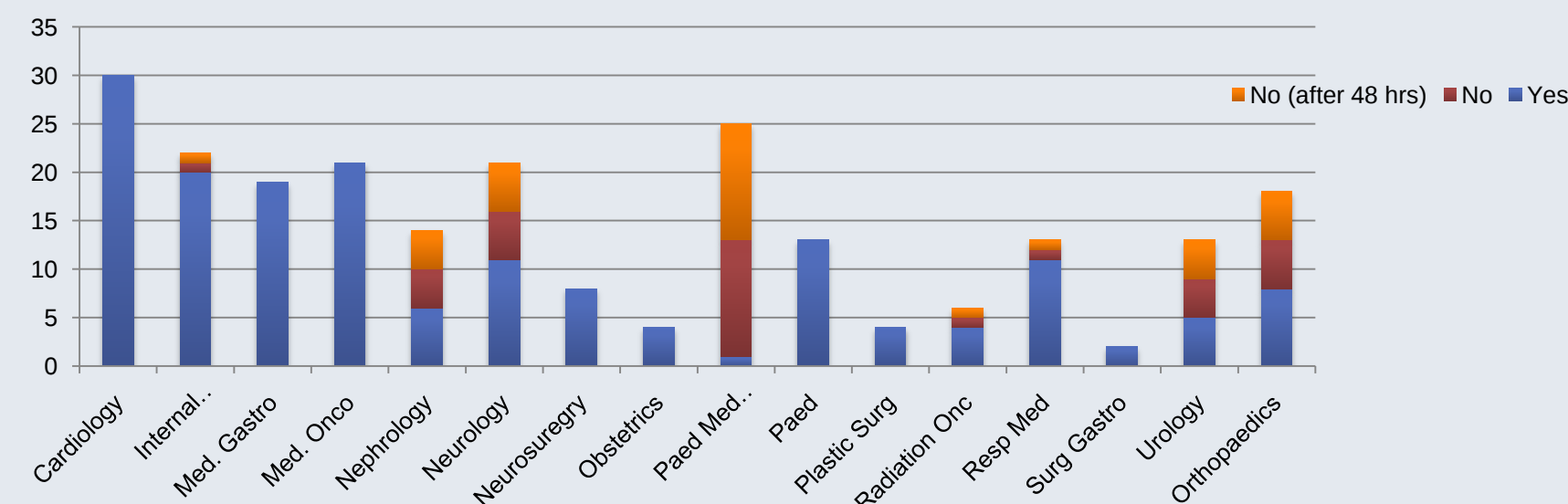
Study Design: Descriptive study

Sample size: A sample of 200 inpatients was taken under study.

Duration of study: 10 days

Data was collected by observing and recording from the medical records of inpatients everyday within 24 hours of admission and reviewed after 48 hours with respect to completion of 'provisional diagnosis' head in the files

RESULT



RECOMMENDATIONS

- Hospital consumption of antibiotics per department/specialty and ward must be worked out to ascertain the areas of maximum consumption.
- Representative samples with the largest from departments and ward with maximum consumption must be taken
- Another parameter 'investigations' must be observed for compliance provide a more comprehensive correlation of compliance, as ordering the culture sensitivity tests is an important factor in deciding to de-escalate, stop or continue the antimicrobial therapy.