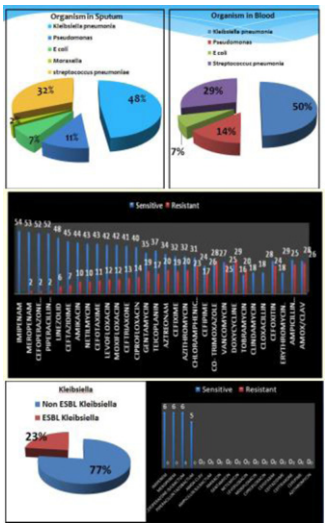

Conclusion: In hospital setting, empirical management for cases of CAP should be based on local bacteriological profile. The present study has shown K.pneumoniae as the most common pathogen and cefoperazone-sulbactum as the most likely effective antimicrobial in hospitalized patients with CAP . Possibility of Extended spectrum beta lactamase producing klebsiella should be considered when elderly patients with multiple co- morbidities admitted with CAP in ICU. Indiscriminate use of carbapenams can be avoided in these patients, since cefoperazone sulbactum also caters to the need, leading to better antibiotic stewardship.

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Empiric antimicrobial therapy for different types of gall bladder pathologies based on bacterial etiology

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Background: Cholecystectomy is a clean contaminated surgical procedure unless infected bile spills into the peritoneum. A single dose of Cefazolin is recommended for antimicrobial prophylaxis in high risk patients undergoing cholecystectomy. With drug resistance being common in the community, there is need to formulate empiric antibiotic policies based on local etiological data .

Methods & Materials: This was a prospective study conducted from April 2015 to May 2015. Gall bladder swabs, bile & pus samples were accepted as samples and processed for aerobes & for anaerobes using conventional media and special media. Identification of aerobes and anaerobes was performed using Vitek cards. The AST for aerobes was performed on the Vitek . The antibiotic susceptibility testing (AST) for anaerobes was performed using E tests. Patients were classified on the basis of the different gall bladder pathologies based on clinical diagnosis, laboratory parameters like total leukocyte counts, C-Reactive protein and radiological investigations like ultrasound (USG) of the abdomen, Computerised tomography (CT) abdomen, ERCP/MRCP for common bile duct calculi. They were also risk stratified based on previous healthcare contact, antibiotic exposure, diabetes mellitus and prior invasive procedures.

Results: 91 specimens were processed during the study period. 38(42%) were culture positive. 28(73%) culture positives were monomicrobial & 10 (27%) were polymicrobial . E.coli & Enterococcus were the predominant gram negative& gram positive organisms respectively. AST showed 40% ESBLs & 20% Carbapenam Resistant Organisms. History of previous healthcare contact & consumption of antimicrobial agents were important risk factors for acquisition of drug resistance. Beta lactam + Betalactamse (BL/BLI) with or without Aminoglycosides were good empiric options sparing carbapenems. Both gram positive & gram negative organisms showed < 50% susceptibility to Fluoroquinolones.

Conclusion: Cholecystectomy for asymptomatic cholelithiasis in a low risk patient performed laproscopically does not require prophylactic antibiotics. Cefazolin, cefuroxime or Aminoglycosides may be useful as single dose prophylactic agents in low risk patients with other gal bladder pathologies. For high risk patients empiric therapy should cover for Enterococci and aerobic gram negative bacilli. Fluoroquinolones have no role to play in empiric therapy for gall bladder infections.

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Missed opportunities for shared decision making in antimicrobial stewardship: The potential consequences of a lack of patient engagement in secondary care

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Background: Within infectious diseases in secondary care, understanding of the potential for behavioural changes arising from patient involvement in antimicrobial decision making is lacking. Shared decision making is becoming part of international policy. The United States have passed it into legislation and the United Kingdom has implemented a number of national interventions across healthcare pathways. This study aims to understand the level of patient involvement in decision making around antimicrobial use in secondary care and the potential consequences associated with it.

Methods & Materials: Fourteen members of the public who had received antimicrobials from secondary care in the preceding 12 months were recruited to participate in group interviews. Group interactions were audio-recorded, transcribed verbatim, and thematically analysed.

Results: Participants reported feelings of disempowerment during episodes of infection in secondary care. Information is currently communicated in a unilateral manner with individuals 'told' that they have an infection and will receive an antimicrobial (often

unnamed), leading to loss of ownership, frustration, anxiety and ultimately distancing them from participation in decision making. This poor communication drives individuals to seek information from alternative sources, including on-line resources, which are associated with concerns over reliability and individualisation. This failure of communication and information provision from clinicians in secondary care influences individual's future ideas about infections and their management. This alters their future actions towards infections and antimicrobials and can drive non-adherence to prescribed antimicrobial regimes and loss-to-follow-up after discharge from secondary care.

Conclusion: Current infection management and antimicrobial prescribing practices in secondary care may be failing to engage patients in the decision making process. It is vital that secondary care physicians do not view infection management episodes as discrete events, but as cumulative experiences which have the potential to drive future non-adherence to prescribed antimicrobial regimes and thus poor individual outcomes and antimicrobial resistance. This lesson is transferable to all settings of healthcare, where poor communication and information provision having the potential to influence future health seeking behaviours. We call for the development of clear, pragmatic mechanism to support healthcare professionals and patients engage in infection related decision making during consultations.

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Microbial profile of prosthetic joint infections and effectiveness of cefuroxime prophylaxis: Experience from a tertiary care hospital

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Background: Prosthetic Joint Infection (PJI) is a serious and devastating complication of total joint arthroplasty (TJR). Currently, second generation cephalosporins (cefuroxime or cefazolin) are the preferred antibiotics for prophylaxis in TJR. The aim of the study was to determine the microbial profile of PJI and assess the effectiveness of cefuroxime as antibiotic prophylaxis.

Methods & Materials: Patients with suspicion of PJI as per musculoskeletal infection society (MSIS) criteria were screened from June 2013 to June 2015. Each patient had multiple site samples (pus, synovial fluid & periprosthetic tissues). All samples were cultured aerobically and anaerobically as per standard microbiological practice. Antibiotic susceptibility of the isolates was performed according to Clinical Laboratory Standards Institute (CLSI) guidelines.

Results: A total of 54 patients were enrolled of which, 34 were referred from peripheral centers for management of suspected PJI. All the patients received Cefuroxime as antibiotic prophylaxis at the time of both primary and revision arthroplasty. Thirty-six patients were diagnosed to have PJI by microbiological criteria. Gram-negative aerobes were most frequently isolated (64%). Polymicrobial infections were present in 8% of cases. No anaerobes were isolated. The most common isolates were Staphylococcus aureus (23%) followed by Escherichia coli & Pseudomonas aeruginosa (18%) and Klebsiella pneumoniae (15%). Methicillin resistance was noted in 22%of the isolates. Fifty four percentages of gram-negative isolates were Multi Drug Resistant (MDR). In 87% of patients, the microorganisms cultured were not susceptible to cefuroxime. All the gram-negative isolates were uniformly resistant to cefuroxime whereas only 36% of gram-positive isolates were susceptible. Gram-positive isolates were uniformly susceptible to vancomycin, teicoplanin and linezolid; for gram-negative bacilli colistin followed by tigecycline and imipenem showed good activity.

Conclusion: Compared to Western literature a predominating MDR gram-negative aetiology of PJIs was noted. Uniform resistance of all the gram-negative isolates to cefuroxime has raised serious concerns about continuing with the practice of using this drug for prophylaxis against PJI at our center. The antibiotic prophylactic regimes should be based on a local knowledge of microbial profile and susceptibility patterns of the causative microorganisms to decrease the incidence of PJI.

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Antibiotic prescribing to the inpatients diagnosed with Malaria and Viral fever in two tertiary care hospitals in Madhya Pradesh India

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Background: Indiscriminate antibiotic prescribing is cause for the global increase in antibiotic resistance. Hospitals are major antibiotics users and thus substantially contribute in the development of resistant bacterial strains. The situation is highly under-estimated due to the paucity of studies from major antibiotic consumer countries like India. Aim of the present study was to describe and compare antibiotic prescribing among in-patients diagnosed for non-bacterial infections, at the medicine departments of two private sector hospitals, a teaching (TH) and a non-teaching (NTH), in Madhya Pradesh, India.

Methods & Materials: The data was collected manually for all in-patients for 3 years between 2008 and 2011. Patients were grouped using International Classification of Diseases-10 system for the recorded diagnoses. Patients having bacterial infections were excluded from analysis. Prescribed antibiotics were classified