Symposium 11.1

Impact of Resistance on Clinical Practice in Pediatrics

Nancy K. Henry, Ph.D., M.D.
Mayo Eugenio Litta Children's Hospital
Mayo Clinic, Rochester, MN, USA

Antibiotic resistance results in increased morbidity, mortality and cost of medical care and impacts on quality assurance and patient safety. Concerns regarding antibiotic resistance affect how pediatricians prescribe antibiotics, but parental demand and time pressures often supersede rational decision making. Nonetheless change is occurring to minimize or lessen the impact of antibiotic resistance. Education of both clinician providers and parents on the potential risks of antibiotic use and misuse may be beneficial. With assistance from the CDC Get Smart Campaign which is directed at educating providers, parents and adolescent patients and the IDSA Antimicrobial Stewardship Guidelines ((ASG) published in January 2007, pediatricians have the opportunity to move forward. The ASG recommendations are derived primarily from studies with hospitalized adults and there are few studies published that have focused on hospitalized newborns, children and adolescents. There are survey results from the national Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey that show a reduction in antibiotic prescribing rates. The 1992-2000 data indicate prescribing rates were down 25% overall and down 33% for children less than 15 years of age when prescriptions were given in a pediatrician's office. Clearly more data is needed to demonstrate the role of education and the impact of antimicrobial stewardship on the reduction of antibiotic use and the anticipated reduction in antibiotic resistance among pediatric and adolescent patients.