cases (59% vs 63%), respectively ($P = .62$) nor did the proportion with ICU stay (14.3% vs 12.3%), respectively ($P = .40$). Median LOS for drug-resistant TB cases and susceptible cases were similar: 5 days (range, 0–303 versus 4 days (range, 0–111), respectively. **Conclusions:** Rates of drug-resistant TB are lower in the VHA than in the general US population. However, improvement is needed in LTBI screening and treatment rates. Little has been published on drug resistance in extrapulmonary TB; however, our findings should alert clinicians to the possibility of resistance in these challenging infections.

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Prevalence, Distribution, and Antibiotic Susceptibilities of Nosocomial Infections at a Tertiary Hospital in Port Harcourt, Nigeria

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Background: Previously, many infections could be treated effectively based on the clinician's past clinical experience. The development of resistance to essentially all of the antimicrobial agents currently in use in clinical practice has made this scenario more of the exception than the norm. Selecting an appropriate antimicrobial agent has become increasingly more challenging; the clinician has to navigate through the variety of available agents in the face of increasing antimicrobial resistance. The diagnostic laboratory now plays very important role in clinical practice. To ensure safe and effective empirical treatment, a surveillance study of the susceptibility pattern of common pathogens and appropriate use of antibiotics is imperative. **Objective:** We report on the prevalence, distribution, and antibiotic susceptibility patterns of nosocomial pathogens isolated at the University of Port Harcourt Teaching Hospital (UPTH) and the effectiveness of the antibiotics commonly prescribed at the hospital in treating these infections. **Methods:** A retrospective cross-sectional study of specimens received at the microbiology laboratory was conducted over a 6-month period, from October 2015 to March 2016, using urine, blood, and semen specimens. In total, 5,160 samples received and analyzed at the laboratory within the study period were assessed. **Results:** Of the 5,160 specimens analyzed, 881(17.07%) were positive for bacteria: 691(78.43%) from urine, 86 (9.76%) from blood, and 104 (11. 81%) from semen. *Escherichia coli* (35.74%), *Klebsiella pneumoniae* (52.33%), and *Staphylococcus aureus* (65.4%) were the most frequently isolated pathogens from urine, blood, and semen, respectively. Widespread multidrug resistance was observed among the organisms. *Klebsiella pneumoniae*, *S. aureus*, and *E. coli* isolated from urine were resistant to amoxicillin/clavulanate, cefuroxime, ceftazidime, ciprofloxacin, ampicillin, gentamycin, and ceftriaxone. A review of the pattern of prescribing antibiotics revealed that in the emergency unit, ceftriaxone (34.09%) and metronidazole (30.09%) were most frequently prescribed, whereas in the general outpatient department, metronidazole (19.09%), amoxicillin (16.61%), amoxicillin/clavulanate (9.39%), and ofloxacin (9.39%) were often prescribed. *S. aureus* was susceptible to only ceftriaxone, whereas *K. pneumoniae* and *E. coli* were susceptible only to ofloxacin. **Conclusions:** Most of the isolated pathogens were not susceptible to the frequently prescribed antibiotics. Empirical prescribing of antibiotics without current epidemiological data of pathogens in the hospital can only further exacerbate the problem of antimicrobial resistance. The need for periodic epidemiological surveillance and rational use of antibiotics anchored on a good antibiotic stewardship program is therefore strongly recommended.

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Preventing Transmission of Vaccine-Associated Viral Infections from a Patient With Severe Combined Immune Deficiency

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Background: The transmissibility of vaccine-strain viruses from immunocompromised patients, such as those with severe combined immune deficiency (SCID) is unknown. The infection control management of a patient diagnosed with SCID and infected with vaccine-strain varicella zoster virus (VZV) and measles virus is described below. A previously healthy, full-term boy was vaccinated at 14 months with measles mumps rubella varicella (MMR) vaccine. He had received prior vaccinations, including rotavirus, without adverse effects. During the 6 weeks after vaccination, the patient developed signs and symptoms clinically consistent with chicken pox and measles. An immune work-up revealed SCID. **Methods:** The Alberta Health Services (AHS) SCID protocol was followed to manage the patient upon admission at 17 months of age. Multiple meetings with various stakeholders were held to ensure appropriate precautions were followed to minimize the risk of pathogen transmission. **Results:** The patient was placed on airborne and contact precautions in a negative-pressure room. The pressure differential of the room to the corridor was continually monitored and displayed at the entry to the room. Staff known to be immune to VZV or measles were not required to wear an N95 respirator. All intrahospital movement of the patient was coordinated with the respective care teams and departments, including infection prevention and control, facilities maintenance and engineering, respiratory therapy, and diagnostic imaging. A mask was placed on the patient when movement outside the room was required. VZV testing was positive for the Oka/vaccine strain on all samples tested (ie, nasopharyngeal, skin, blood, and cerebrospinal fluid). Nasopharyngeal swabs and blood were PCR positive for measles genotype A/vaccine strain virus. Both viruses were persistently positive in spite of treatment with acyclovir, valganciclovir, varicella zoster immune globulin, and intravenous immune globulin. **Conclusions:** There is currently no documented transmission of measles vaccine-strain virus, and transmission of VZV vaccine-strain virus is rare. According to the AHS SCID protocol, the use of airborne and contact precautions for a patient identified with measles and/or VZV supersedes the use of a positive-pressure room for patients identified with SCID. Newborn screening for SCID was