

Antimicrobial Resistance of *Vibrio cholerae* among Patients Admitted for Acute Watery Diarrhea in Hospitals of Mandalay City

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Acute diarrhea defined as an increased frequency of defecation (3 or more times per day or at least 200 g of stool per day) lasting less than 14 days, may be accompanied by nausea, vomiting and abdominal cramping. Acute diarrhoeal diseases may occur in all ages. Acute diarrhoea can be caused by a number of different agents such as viruses mostly caused by *Norovirus*, *Rotavirus*, *Adenovirus*, or *Astrovirus*, [bacteria](#), or [parasite](#). Rotavirus diarrhea is an acute infection primarily of children less than 2 years of age, characterized by watery stools and vomiting. Cholera remains one of the great epidemic diseases of the tropical world. A case of cholera is confirmed when *Vibrio cholerae* O1 or O139 is isolated from any patient with diarrhea. Cholera is an extremely virulent disease that affects both children and adults. The prominent clinical feature of cryptosporidiosis is diarrhea, which is mild and self-limited (1-2 weeks) in normal persons but may be severe and prolonged in immunocompromised person. A total of 390 participants at (550) and (300) Bedded Children Hospitals (Mandalay), Mandalay General Hospital, (300) Bedded Teaching Hospital (Mandalay) and Communicable Diseases Hospital (Mandalay) from May 2015 to August 2015 were enrolled in this study and analyzed the data. In this study, 104 patients (26.7%) out of 390 participants revealed infected with *Vibrio cholerae* according to their stool culture result. Twenty nine out of 100 under five years age patients (29%) revealed Rota virus detected by using SD bioline Rota virus test device. Fifty one cases (13.1%) revealed *Cryptosporidium parvum* infection all immunocompromised person. Antibiotic sensitivity pattern showed resistant to Tetracycline, Cotrimoxazole and Erythromycin while sensitive to Doxycycline, Ciprofloxacin and Chloramphenicol.