EC (25%), FQ (20%), CAR (4%), and DAP (133%) occurred. In 2010, AMT was re-implemented and resulted in 12 and 15% reduction in total AE. Cost savings exceeded $300,000.

From 2010 to 2014, we have implemented multiple strategies to further control AU.

Conclusion: Since 2004, AMT has implemented strategies that reduced the consumption of RAP agents and Pseudomonas resistance has not increased. Re-implementation of AMT responsible for administering institutional guidelines and providing direct feedback resulted in rapid decrease in AE. ACPD. The most gains in the AMT implementation occur early and sustaining an effective AMT requires administrative support and adapting strategies to challenges faced and anticipated.

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Identification of biofilm-stage specific proteins associated with multidrug resistance and quorum sensing pathway in a pandemic strain of Vibrio parahaemolyticus isolated from India

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Background: Vibrio parahaemolyticus, a Gram negative halophilic bacterium, is rated as one of the leading etiological agent of food borne diseases in humans. Gastroenteritis is the most common clinical manifestation and specific serotypes of this pathogen were associated with pandemic outbreaks in several parts of the world since 1996. Recent studies conducted in the related Vibrio pathogens has revealed the role of biofilm mode of life in the emergence of multidrug resistance and pathogenicity. Present study was conducted to identify the genes and pathways specific to the biofilm stage of V. parahaemolyticus employing high throughput global proteomic approaches.
Results: In the present study, 45.5% of the total proteome of V. parahaemolyticus was identified which is the largest proteome coverage obtained till date. Comparative proteome analysis revealed 52 down-regulated and 47 up-regulated proteins in biofilm stage compared to log-phase and stationary-phase planktonic stage [Figure 1]. Integration of quantitative and qualitative proteomic results identified 246 proteins specific to the biofilm stage which on functional analysis provided evidence for the expression of proteins associated with multi-drug resistance and quorum sensing pathway during biofilm stage [Figure 2]. Proteome analysis also provided evidence for expression of 17 proteins in tdh pathogenicity island and 11 proteins in the super integron region.

Conclusion: Proteomic data generated in the present investigation provided fundamental information and set of interesting targets for a multifaceted analysis of biofilm formation mechanism. First study to provide evidence for quorum sensing (QS) regulated biofilm formation and the involvement of genes related to multidrug resistance during biofilm stage. Study provided potential drug targets which could be used in virtual high-throughput screening method for accelerating the discovery of anti-virulence drugs that do not provoke resistance.

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