

March 12-13, 2018
London, UK

Rahul Hajare, Int J Drug Dev & Res 2018, Volume 10

HOW TO SOLVE A PROBLEM LIKE ANTIBIOTIC RESISTANCE

Rahul Hajare

National AIDS Research Institute, India

There has been much recent talk about how to target the rising tide of ART resistance across the world, one of the biggest threats to global health today. While there is no doubt about the problems faced by scientists, healthcare professionals and the pharmaceutical industry, there are innovative ways we can target ART resistance in the short term. With only a few ART in development and a long drug development process (often 10-15 years), there is concern that what is being done to combat ART resistance may be 'too little, too late'. "If virus continues developing resistance to multiple ART at the present rate, at the same time as the ART pipeline continues to dry up, there could be catastrophic costs to healthcare and society globally", reported in reputed articles. While any ART resistance is concerned, the increasing incidence of ART-resistant mutant virus has become a particular problem as strains resistant to multiple ART are becoming common and no new drugs to treat these infections (e.g., New entrance-resistant *Enterobacteriaceae*) will be available in the near future. These mutant viruses are considered the most critical priority in the list of the 12 families of virus that pose the greatest threat to human health that was just released by the World Health Organization. The reasons for high levels of ART

resistance observed in these critical Gram-negative organisms are explained in another research article in the same issue and extended literature. After a close monitoring, one of the main contributing factors to the increased resistance observed in Gram-negative bacteria is the permeability barrier caused by their additional outer membrane. An innovative strategy that is gaining momentum is the synergistic use of antibiotics with FDA-approved non-antibiotics. Using this novel approach, an FDA-approved non-antibiotic drug is combined with a specific antibiotic that enables it to breach the outer membrane barrier and so restore the activity of an antibiotic.

Biography

Rahul Hajare has completed his PhD in Pharmacy Medicinal Chemistry from Vinayaka Mission's Research Foundation and Postdoctoral Studies from ICMR-National AIDS Research Institute (NARI), ICMR PDF grant of 7th Batch (2013). He has worked as Associate Professor of Pharmaceutics at BSPM College of Pharmacy-Dr. Babasaheb Ambedkar Marathwada University Aurangabad. He has published more than 58 papers in reputed journals.

rahulhajare@rediffmail.com