

International Conference & B2B on

Pharma Research and Development

June 06-07, 2018 | Philadelphia, USA

Non-antibiotics: The answer to the antibiotic resistance crisis

Stephen J Fey and Jette H Kristiansen
University of Southern Denmark, Denmark

The effect of compounds on tissues and organs, with a view to promoting the well-being of a patient is classically described by pharmacology. However, this is only a special case of 'reality'. With the dual realization that compounds can also have effects on microorganisms living in and on the patient, and that these microorganisms play a vital role in maintaining the health of the patient, it is essential that we change our perspective to embrace a general theory for pharmacology. We must consider the effect of compounds on both the patient and his or her microbiome and the interactions between them. There are numerous examples of this general theory. One important example is chlorpromazine (a phenothiazine) which was used to treat mental diseases in the beginning of the 1950's, 'by accident' also cured patients suffering from tuberculosis. Patients with stomach ulcers were successfully treated with an antidepressant (trimipramine), long before it was realized that compound was affecting the causative *Helicobacter pylori* infection. These 'classical' pharmacological compounds which have been shown to act as antibiotics or antibiotic adjuvant and are now referred to as helper compounds or non-antibiotics. The importance of this field becomes clear when one considers that specific non-antibiotics can be used to successfully treat seriously resistant infections where currently antibiotics are ineffective. In other words, non-antibiotics offer an unexploited solution to the antibiotic resistance crisis that society is currently facing.

sjf@celvivo.com

Notes: