### Homoeopathy: an alternative to antibiotic resistance

#### By Dr Rita

**Abstract:** Antibiotic resistance is one of the global threats of health today. Antibiotic therapy has created systemic disorders and provoked a weakening of the entire immune system. Homoeopathic remedies can be beneficial as they act by modulating the host immunity and has the least side effects if well selected and administered with proper dosage.

**Keywords:** Antibiotic resistance, bacteria, mutation, infections, homoeopathy.

**Abbreviations:** Centers for Disease Control and Prevention (CDC), World Health Organisation (WHO), antimicrobial resistance (AMR), methicillin-resistant Staphylococcus aureus (MRSA), multi-drug-resistant (MDR), tuberculosis (TB), urinary tract infection (UTI), over-the-counter (OTC), infection prevention and control committee (IPC)

#### Introduction

Tumber of infections becoming harder to treat as the organisms are undergoing genetic mutations1 and the antibiotics used are becoming less effective day by day. Numerous important organizations, like the Centers for Disease Control and Prevention (CDC), Infectious Diseases Society of America, World Economic Forum, and the World Health Organisation (WHO) have declared antibiotic resistance to be a "global public health concern."2.3

Globally 700,000 people losing battle to antimicrobial resistance (AMR) per year and another 10 million projected to die from it by 2050, AMR alone is killing more people than cancer and road traffic accidents combined together.<sup>4</sup> In India the infectious disease burden is among the highest in the world and recent report showed the inappropriate and irrational use of antimicrobial agents against these diseases, has caused an increase in development of antimicrobial resistance.<sup>5</sup>

History - The modern era of antibiotics started with the discovery of penicillin by Sir Alexander Fleming in 1928. Since then, antibiotics have transformed modern medicine and saved millions of lives. Penicillin

successful in controlling bacterial infections among World War II soldiers. However, shortly thereafter, penicillin resistance became a substantial clinical problem and in response, new betalactam antibiotics were discovered. However, the first case methicillin-resistant Staphylococcus aureus (MRSA) was identified during that same decade, in the United Kingdom in 1962 and in the United States in 1968. From the late 1960s through the early 1980s, the pharmaceutical industry introduced many new antibiotics to solve the resistance problem, but after that the antibiotic pipeline began to dry up and fewer new drugs were introduced. As a result, in 2015, many decades after the introduction of antibiotics, bacterial infections have again become a threat.<sup>6,7</sup>

Antibiotic resistance - "It is an ability of bacteria or other microbes to resist the effects of an antibiotic which occurs when bacteria change in some way that reduces or eliminates the effectiveness of drugs, chemicals, or other agents designed to cure or prevent infections. The bacteria survive and continue to multiply causing more harm." 8,9

Mechanism of resistance - The development of resistance to an antibiotic by bacteria invariably involves either a mutation at a single point in a gene or transfer of genetic

material from another organism. The bacteria survive and continue to multiply causing more harm.<sup>10</sup>

- Factors promoting antibiotic resistance<sup>10,11,12,13</sup>
- Inappropriate use of antibiotics
- Patients not finishing the entire antibiotic course
- Overuse of antibiotics in livestock and fish farming
- Poor infection control in health care settings
- Poor hygiene and sanitation

# Scope of homoeopathy

Homoeopathy believes suppression of various chronic diseases by the indiscriminate use of antibiotics or other modern drugs as being the causes of many incurable diseases. Bacteria cannot produce disease unless we are susceptible to be affected by them. They can only grow, multiply and survive if they get suitable environment. The defensive mechanism of our body (the immunity) successfully resists all bacterial and viral infections through the specific immunoglobulins and various other factors involved in the same mechanism. When any microbe over power the immunological factors, the patient becomes a victim of those particular bacteria or viruses. There are two ways to get rid of this condition:

- By killing the microbe directly with medicines given in physiological doses
- By stimulating the natural defensive mechanism which becomes stronger than the disease force and thereby indirectly kill the microbe or cause them to die out from the system for want of suitable environment for their growth and multiplication. Homoeopathic medicines act through this way.

Therefore, the dynamis present in any microbe is responsible for their growth and multiplication. The dynamis of the bacteria acts on the vital dynamis of a person, if it is stronger than the vital dynamis, it can produce disease. In order to make the vital dynamis free from the effect of the disease dynamis, we are to take the help of another stronger dynamis, i.e. drug dynamis (homoeopathic medicine) which stimulates the vital dynamis and thereby the defensive mechanism of our body resulting in cure (aphorism 16 of Organon of medicine). 14,15

## Views of some stalwarts in homoeopathy

• Cases of recurrence of the disease and side-effects of the drugs when antibiotics and sulpha-drugs have been used can be treated successfully by the 200th potency of the same drug, generally on weekly basis. If this is not possible, the cases have to be treated after clearing the field first with the help of such medicines as Carbo vegetabilis, Sulphur, Nux vomica, Thuja occidentalis. Then the symptoms of the disease before the administration of

- the modern drug have to he collected. This along with the past history and family history would provide the basis for starting the treatment.<sup>16</sup>
- Pyrogen has very clear indications like hyperpyrexia, oscillating temperature double rise of temperature, a feeling of euphoria in spite of fever, etc. It has symptoms of several drugs like Arnica montana, Arsenicum album, Baptisia tinctoria, etc., all rolled into one. It is indicated in a wide variety of fevers and it can be called the "homoeopathic broad spectrum antibiotic", of course acting on its own indications. It is almost a specific for puerperal sepsis. Foubister says that it may be prescribed even pathologically when there is a septic focus with either a swinging temperature or disproportion between pulse and temperature.17

#### Approach to case-taking

During the time of Master Hahnemann, the diseases as well as conventional treatment were few. Now, with the phenomenal increase in population, not only new diseases with new drugs have came up but also a special category of druginduced diseases has sprung up. In such conditions the physician has to know the previous state of patient before he was treated with antibiotic and the other drugs suppressing the symptoms in order to complete picture of disease that is of conjoint malady formed by the medicinal and original diseases, which from the use of inappropriate drugs is generally more dangerous than the original disease (aphorism 92 of Organon of Medicine). Homoeopathic constitutional treatment take care of all these conditions successfully if the cases are not far developed.

#### **Related rubrics**

Murphy Repertory<sup>18</sup>

Female - VAGINITIS, infection - antibiotics, after

ars. chin. lyc. merc. *Nat-p. Nit-ac.* puls. thuj.

Skin - URTICARIA, hives - antibiotics, after

Apis ars. moni. Nit-ac. pen.

Synthesis Repertory<sup>19</sup>

GENERALS - HISTORY; personal - antibiotics; of use of

carb-v. mag-p. op.

GENERALS - HISTORY; personal - medicine; of abuse of allopathic

Lach. Nux-v. Sulph.

GENERALS - WEAKNESS - antibiotics; from

carb-v.

SKIN - ERUPTIONS - antibiotics; from

rhus-v.

A Concise Repertory of Homoeopathic Medicines by S.R. Phatak<sup>20</sup>

D - Drugs; abuse of - in general

aloears. camph. *Carb-v.* cham. coloc. hep. *Hydr.* kali-i. nat-m. nit-ac. **NUX-V.** *Puls.* sec. *Sulph.* teucr.

D - Drugs; abuse of - antityphoid injections

bapt.

D - Drugs; abuse of - tetanus, antitoxin

mag-p.

S - Streptococcus infection

ail. arn. sul-ac.

### Evidence based studies in homoeopathy

- 1. Two case reports of antibioticresistant urinary tract infection which shows the intervention with a non-conventional, tailormade homeopathy regimen, has been found effective.<sup>21</sup>
- 2. Study on homoeopathic treatment in addition to standard care in multi-drugresistant (MDR) pulmonary TB suggests add-on Homoeopathy in addition to standard therapy appears to improve outcome in MDR-TB.<sup>22</sup>
- 3. A clinical research suggests that homeopathy is effective in the treatment of upper respiratory tract infections in children, a frequent cause of inappropriate antibiotic prescribing.<sup>23</sup>
- 4. A case presented with the complaint of recurrent UTI, responded poorly with conventional medications, was successfully treated with homoeopathic medicine, Lycopodium clavatum.<sup>24</sup>

#### Conclusion

The physician can play a major in combating AMR by timely notifying resistant cases to IPC (infection prevention and control committee). Pharmacists can counsel patients with viral infections about the ineffectiveness of antibacterials and can recommend appropriate OTC (over-thecounter, i.e. non-prescription use of antimicrobials) medication for supportive care. As homoeopathic medicine acts on vital force and stimulates defence mechanism, so there is no need to take antibiotics unless it is really needed and in case of antibiotic resistance Homeopathy also helps in combating development. Hence, bacteria never gets the opportunity of becoming resistant to our mode of treatment.

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