**Antimicrobial agents**

**Introduction**

Antimicrobial agents are considered as a component that is used for the patients in order to kill the growth of bacteria along with fungi and protozoa. The use of the antimicrobial drug is divided and used accordingly to kill the microorganisms. It is basically a drug that is given to the patients to treat them of their ailments. In the past, the treatment for the patients was difficult and the improper treatment resulted in their deaths. It was thus difficult in the earlier days to understand the kind of infections, from which the patients were afflicted. However, in the present scenario, treating these infections has become possible and easier because of the antimicrobial agents (BYJU’S, 2015). Therefore, the objective of the paper is to gather an in-depth understanding on the antimicrobial agents, their differences from the viral ones and the need for distinguishing them effectively.

**Discussion**

**Categories of Antimicrobial Agents**

In the human being as well as animals, different types of diseases or infections are caused because of virus or bacteria. The drugs, which are used to cure these problems, are known as the antimicrobial agents. There are different types of antimicrobial agents such as Antibacterial along with the antifungal drugs, antiviral agent as well as the Antiparasitic drug, which has been described in the bullets below:

**Antibacterial Drug**

These are basically used for killing the bacterial infections. In addition, these drugs are generally used by the doctors and the physicians to treat the patients.

**Antifungal Drug**

This drug is used to prevent the infection that occurs in humans due to accumulation of fungus.

**Antiviral Agent**

These are the drug that helps to prevent the viral infections that the patients suffer from due to virus.

**Antiparasitic Drug**

These are the drugs, which helps in the treatment of the disease, caused by the fungi, protozoa as well as an amoeba (BYJU’S, 2015).

**Differences between Viral and Bacterial Infection**

Bacteria along with viruses cause serious infections in human beings but are not similar. They possess certain features, which are different from each other. It can thus be suggested in the medical sector that viral infections and bacteria treatment should be undertaken only after the proper understanding of the infections. The antibiotics drugs used for both the cases are different. Therefore, if a wrong antibiotic is used for the treatment then it can lead to arousal of some new problem.

The understanding of both the bacterial and the viral infections is important because they include different symptoms. Besides, their treatments procedure requires to with the use of different antibiotics. Strep throat along with cough and urinary infection are the examples of the bacterial infections whereas flu, along with cough, HIV/aids or chickenpox ate considered as the examples of the viral infections. Because of some of the similarities, it becomes difficult for the doctors to understand the kind of infections and the symptoms. Therefore, in order to analyze the infections in the human body, doctors are suggested to examine urine or blood samples so that the proper antibiotic can be prescribed to the patients (Healthdirect.gov., n.d.).

Additionally, some of the bacteria’s in the human body helps to digest foods as well as fights with the disease. Along with that, some helps in providing nutrients to the human body. It has been observed that less than 1 per cent of bacteria cause diseases in the body (WebMD LLC., 2018).

**Reason behind the Proper Identification of Viral and Bacterial Infection**

  The symptoms of bacterial and viral infections are quite similar. However, they possess major differences, which must be essentially identified by the doctors. These similar symptoms disable the doctors to understand the problem of infected patients. Due to this misunderstanding, sometimes doctors prescribe the viral infection antibiotics to the patients and this becomes harmful for their health. Hence, the proper identification of viral and bacterial infection helps to select the proper antimicrobial agents (Healthdirect.gov., n.d.).

**Conclusion**

Based on the study findings, it can be concluded that the antimicrobial agents are the elements that are used to kill the bacteria and fungus that grows in the human body. There is four categories of antimicrobial agents, which include the antifungal along with the antibacterial, anti viral and the antiparasitic ones. These categories of antimicrobial agents make the doctors understand the proper medications that must be given to the patients. Additionally, there is a requirement of proper identification amid the viral and bacterial infections, which to some extent have similarities, disabling the doctors to understand the symptoms and to affect the human nature. Therefore, the overall discussion provides a proper understanding of the antimicrobial agents along with its proper usage.

**References**

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